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(12) **United States Design Patent**
Aston et al.

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- (54) **CONCRETE BRIDGE UNIT**
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- (21) Appl. No.: **29/475,022**
- (22) Filed: **Nov. 27, 2013**

1,332,243 A	3/1920	Whalen
1,474,808 A	11/1923	Zucco
1,734,392 A	11/1929	Moore
1,784,271 A	12/1930	Collins
2,616,149 A	11/1952	Waller
3,195,852 A	7/1965	Lundell
3,286,972 A	11/1966	Jackson
3,397,494 A	8/1968	Waring
3,848,377 A	11/1974	Mori
D241,634 S	9/1976	Nickerson
4,094,110 A	6/1978	Dicken et al.
4,099,360 A	7/1978	Outram
4,141,666 A	2/1979	DeGraff
4,211,504 A	7/1980	Sivachenko
4,314,775 A	2/1982	Johnson
4,318,635 A	3/1982	Gurtner et al.
4,558,969 A	12/1985	FitzSimons
4,563,107 A	1/1986	Peterson
4,564,313 A	1/1986	Niswander et al.
4,587,684 A	5/1986	Miller
4,650,369 A	3/1987	Thomas
4,687,371 A	8/1987	Lockwood
4,693,634 A	9/1987	Chiaves
4,723,871 A	2/1988	Roscoe
4,797,030 A	1/1989	Lockwood
4,817,353 A	4/1989	Woods et al.
4,854,775 A	8/1989	Lockwood
4,972,641 A	11/1990	Barrios
4,972,646 A	11/1990	Miller et al.
4,987,707 A	1/1991	Kiselev et al.
4,993,872 A	2/1991	Lockwood
5,252,002 A	10/1993	Day
5,326,191 A	7/1994	Wilson et al.
5,384,997 A	1/1995	McClinton
D356,163 S	3/1995	Ryan
5,505,033 A	4/1996	Matsuo et al.
5,524,405 A	6/1996	Byrd
5,533,835 A	7/1996	Angelette
5,536,113 A	7/1996	McGregor
5,586,417 A	12/1996	Hendersjon et al.
5,590,433 A	1/1997	Fricke
D380,278 S	6/1997	Cote
5,720,577 A	2/1998	Sanders et al.
5,836,717 A	11/1998	Bernini
D406,364 S	3/1999	Robert
D406,902 S	3/1999	Lockwood
D426,321 S	6/2000	Lockwood
6,094,881 A	8/2000	Lockwood
6,129,484 A	10/2000	Chiaves
6,161,342 A	12/2000	Barbier et al.
6,205,605 B1	3/2001	Orsat
6,205,717 B1	3/2001	Shall et al.
6,243,994 B1	6/2001	Bernini

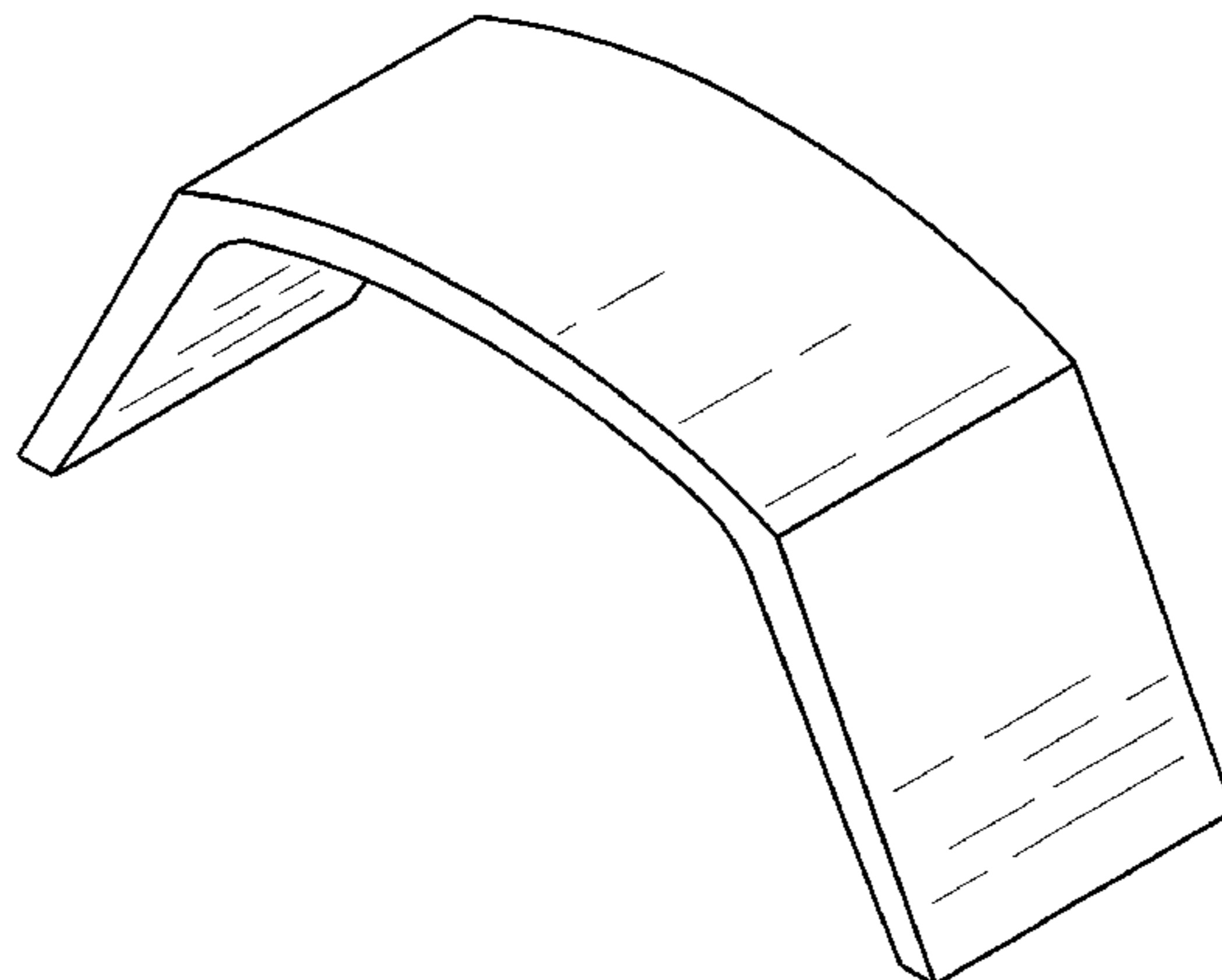
Related U.S. Application Data

- (62) Division of application No. 29/413,755, filed on Feb. 20, 2012, now Pat. No. Des. 697,634.
- (51) **LOC (10) Cl.** **25-03**
- (52) **U.S. Cl.**
USPC **D25/1**
- (58) **Field of Classification Search**
USPC D25/102, 35; 14/2, 24, 25, 26; 405/134, 405/124, 126
See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

109,886 A	12/1870	Freeman
567,653 A	9/1896	Parker
701,034 A	5/1902	Gray
832,017 A	9/1906	Hummel
1,013,440 A	1/1912	Rankin
1,040,442 A	10/1912	Shannon
1,074,268 A	9/1913	Kelly et al.
1,184,634 A	5/1916	Duerswachter
1,219,434 A	3/1917	Burkholder



6,367,214	B1	4/2002	Monachino	
6,408,581	B2	6/2002	Monachino	
6,474,907	B2	11/2002	Semotiuk et al.	
D471,989	S	3/2003	Van Gilst	
6,640,505	B1	11/2003	Heierli	
D484,610	S	12/2003	Lockwood	
D487,778	S	3/2004	Kahlig	
6,719,492	B1	4/2004	Heierli	
D490,533	S	5/2004	Lockwood	
6,854,928	B2	2/2005	Lockwood	
6,922,950	B2	8/2005	Heierli	
D511,215	S	11/2005	Vaia	
D511,387	S	11/2005	Beach	
6,962,465	B2*	11/2005	Zax et al.	405/124
D512,513	S	12/2005	Wasniak et al.	
6,988,337	B1	1/2006	Heierli	
D514,706	S	2/2006	Beach	
7,001,110	B2	2/2006	Lockwood	
7,114,305	B2	10/2006	Heierli	
7,217,064	B1	5/2007	Wilson	
7,305,798	B1	12/2007	Heierli	
D566,852	S	4/2008	Gaster et al.	
D573,722	S	7/2008	Lockwood	
7,556,451	B2	7/2009	Beach et al.	
7,568,860	B2	8/2009	Chiaves	
7,572,084	B2	8/2009	Robertson	
7,720,250	B2	8/2010	Boresi et al.	
7,770,250	B2*	8/2010	Boresi et al.	405/124
D645,572	S	9/2011	Von Handorf	
D658,976	S	5/2012	Morrow	
8,523,486	B2	9/2013	Aston et al.	
8,672,583	B1	3/2014	Mailhot et al.	
2004/0062609	A1	4/2004	Heierli	
2005/0123354	A1	6/2005	Zax et al.	
2006/0174549	A1	8/2006	Dagher et al.	
2006/0201091	A1	9/2006	Lockwood	
2007/0098503	A1	5/2007	Vaia	
2009/0183321	A1	7/2009	Bores et al.	

FOREIGN PATENT DOCUMENTS

EP	0244890	11/1987
EP	0568799	11/1996
FR	2330818	6/1977
WO	WO 92/07144	4/1992

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/417,404, filed Apr. 3, 2012, entitled "Concrete Bridge Unit".

Written Opinion of the International Searching Authority, mailed Aug. 27, 2014, International Application No. PCT/US2014/033459, filed Apr. 9, 2014; 8 pages.

* cited by examiner

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(57) **CLAIM**

The ornamental design for a concrete bridge unit, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a concrete bridge unit;
FIG. 2 is a front elevation of the concrete bridge unit of FIG. 1;
FIG. 3 is a side elevation of the concrete bridge unit of FIG. 1;
FIG. 4 is a perspective view of a second embodiment of a concrete bridge unit;

FIG. 5 is a front elevation of the concrete bridge unit of FIG. 4;
FIG. 6 is a side elevation of the concrete bridge unit of FIG. 4;
FIG. 7 is a perspective view of a third embodiment of a concrete bridge unit;
FIG. 8 is a front elevation of the concrete bridge unit of FIG. 7;
FIG. 9 is a side elevation of the concrete bridge unit of FIG. 7;
FIG. 10 is a perspective view of a fourth embodiment of a concrete bridge unit;
FIG. 11 is a front elevation of the concrete bridge unit of FIG. 10;
FIG. 12 is a side elevation of the concrete bridge unit of FIG. 10;
FIG. 13 is a perspective view of a fifth embodiment of a concrete bridge unit;
FIG. 14 is a front elevation of the concrete bridge unit of FIG. 13;
FIG. 15 is a side elevation of the concrete bridge unit of FIG. 13;
FIG. 16 is a perspective view of a sixth embodiment of a concrete bridge unit;
FIG. 17 is a front elevation of the concrete bridge unit of FIG. 16;
FIG. 18 is a side elevation of the concrete bridge unit of FIG. 16;
FIG. 19 is a perspective view of a seventh embodiment of a concrete bridge unit;
FIG. 20 is a front elevation of the concrete bridge unit of FIG. 19;
FIG. 21 is a side elevation of the concrete bridge unit of FIG. 19;
FIG. 22 is a perspective view of an eighth embodiment of a concrete bridge unit;
FIG. 23 is a front elevation of the concrete bridge unit of FIG. 22;
FIG. 24 is a side elevation of the concrete bridge unit of FIG. 22;
FIG. 25 is a perspective view of a ninth embodiment of a concrete bridge unit;
FIG. 26 is a front elevation of the concrete bridge unit of FIG. 25;
FIG. 27 is a side elevation of the concrete bridge unit of FIG. 25;
FIG. 28 is a perspective view of a tenth embodiment of a concrete bridge unit;
FIG. 29 is a front elevation of the concrete bridge unit of FIG. 28;
FIG. 30 is a side elevation of the concrete bridge unit of FIG. 28;
FIG. 31 is a perspective view of an eleventh embodiment of a concrete bridge unit;
FIG. 32 is a front elevation of the concrete bridge unit of FIG. 31;
FIG. 33 is a side elevation of the concrete bridge unit of FIG. 32;
FIG. 34 is a perspective view of a twelfth embodiment of a concrete bridge unit;
FIG. 35 is a front elevation of the concrete bridge unit of FIG. 34; and,
FIG. 36 is a side elevation of the concrete bridge unit of FIG. 34.

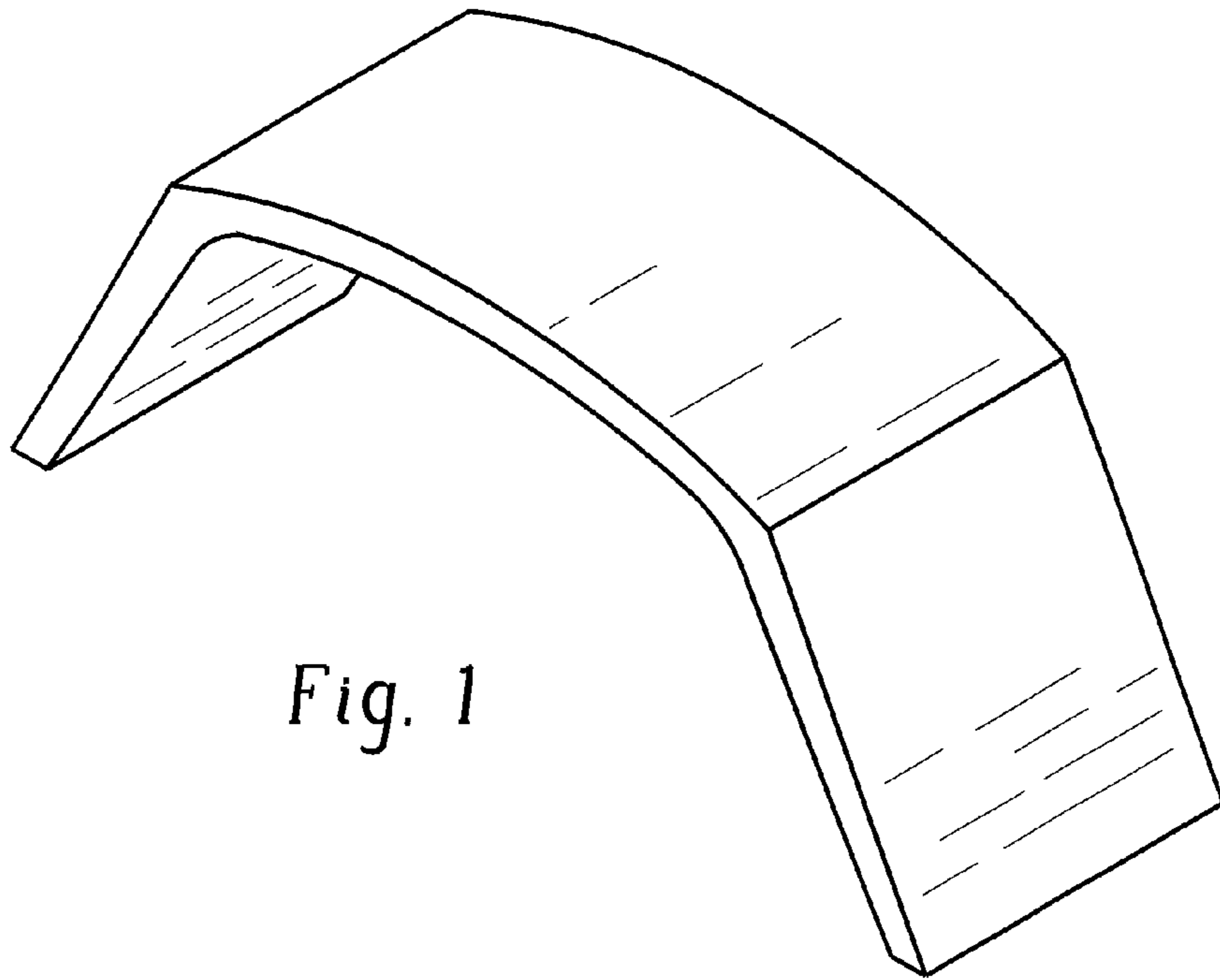


Fig. 1

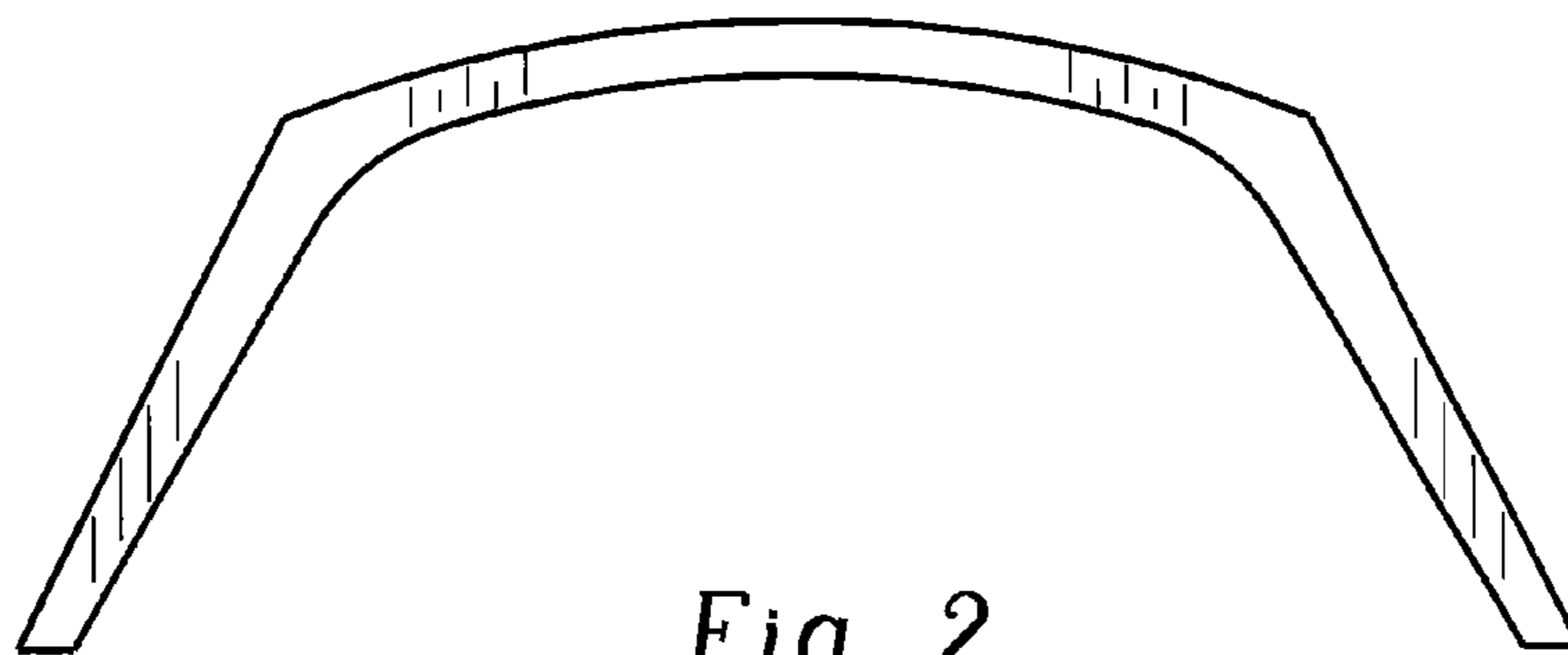


Fig. 2

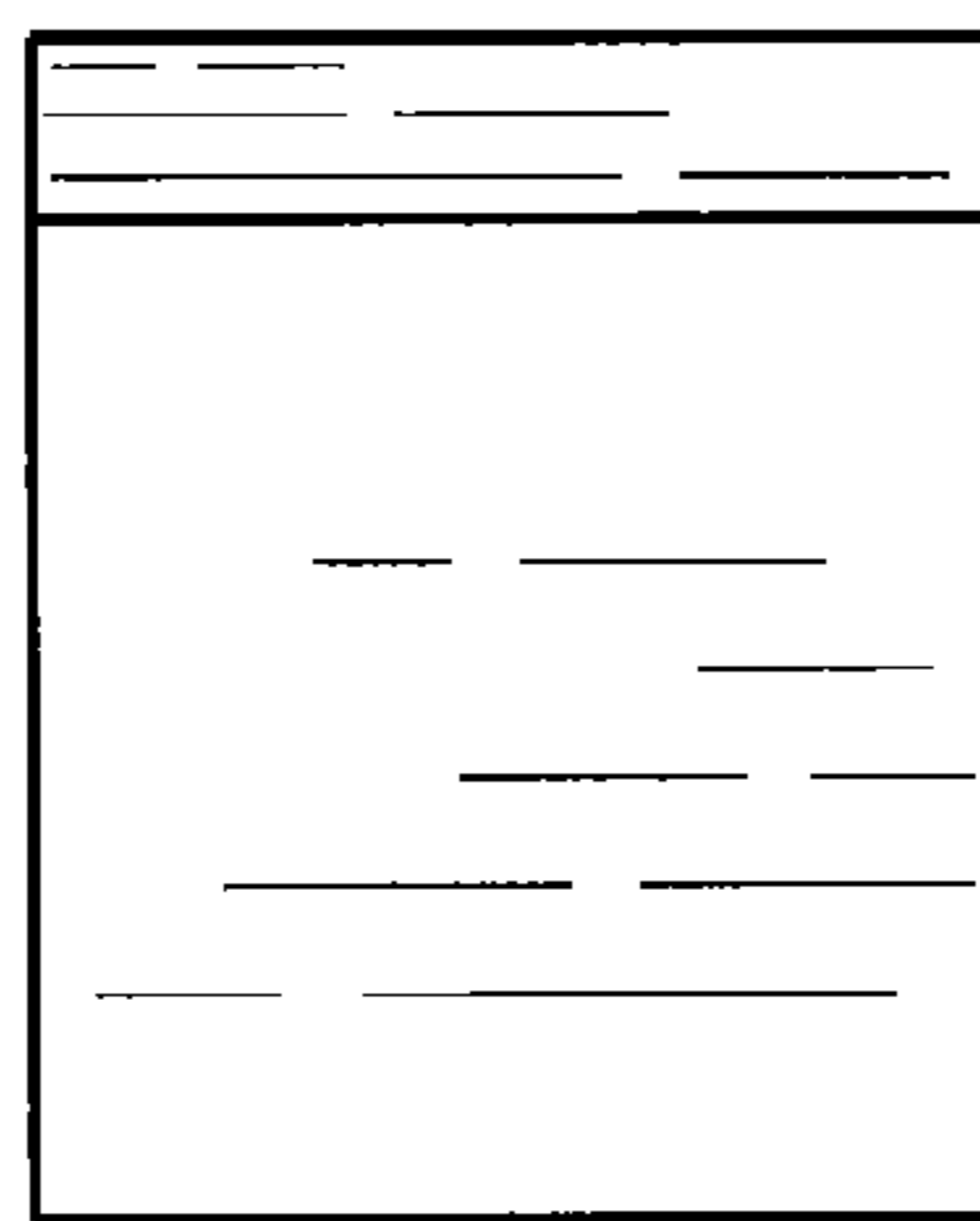


Fig. 3

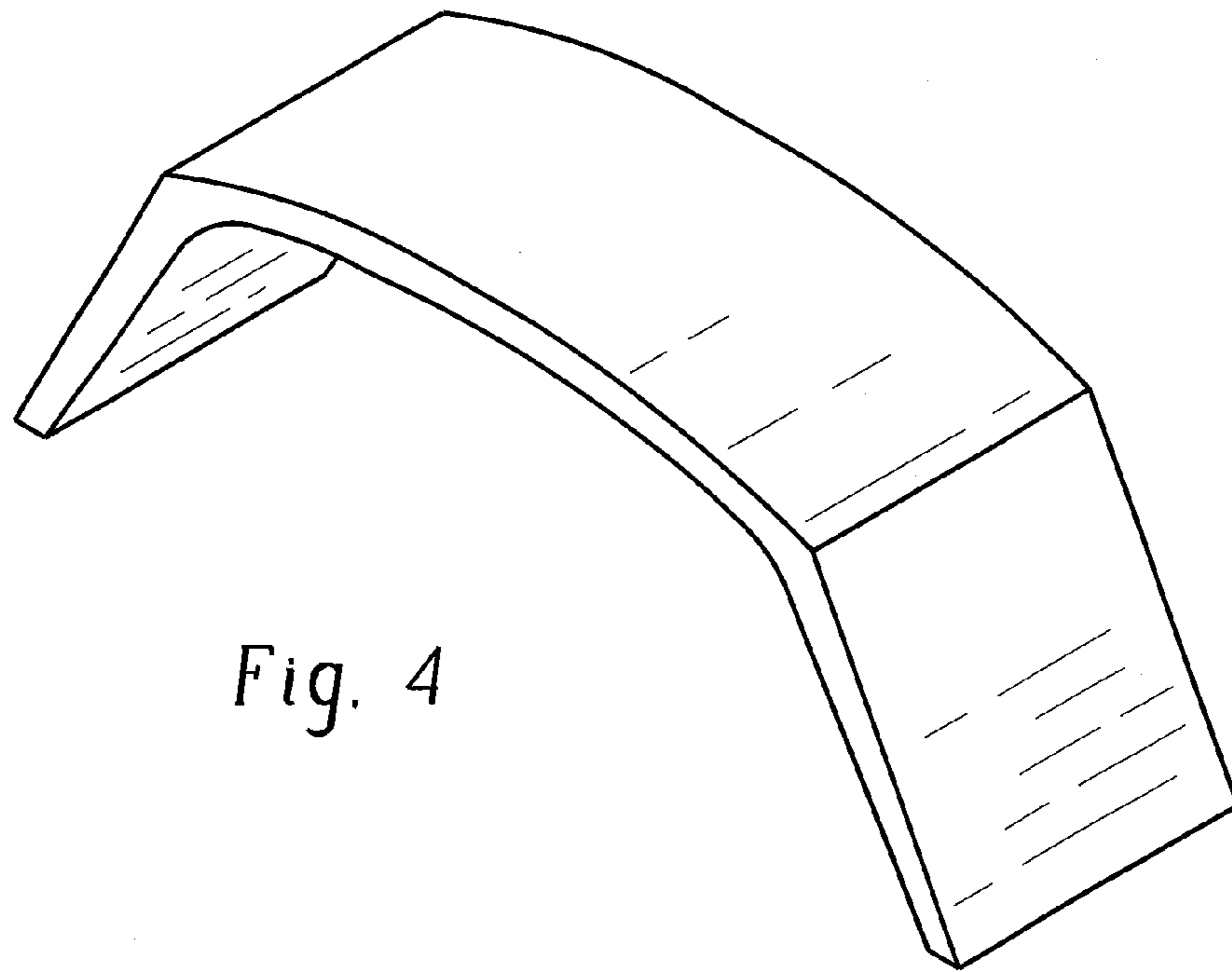


Fig. 4

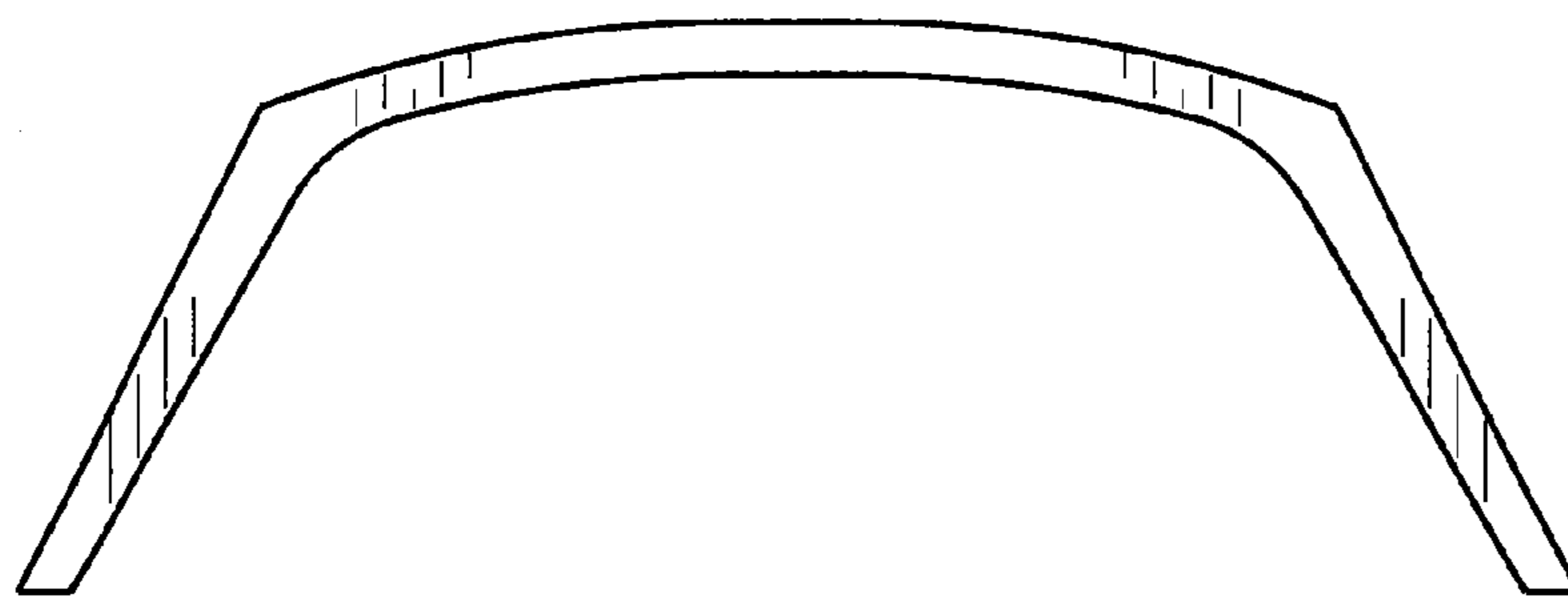


Fig. 5

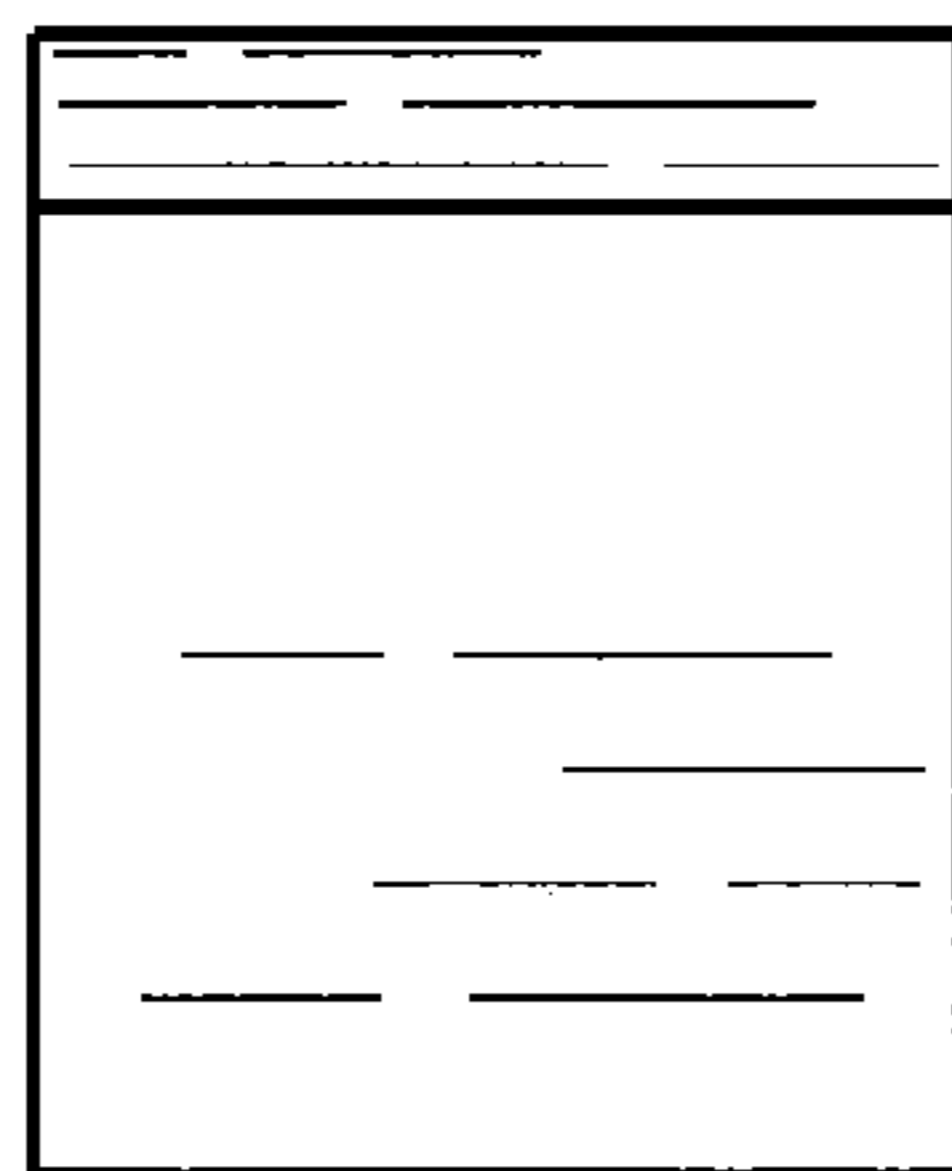


Fig. 6

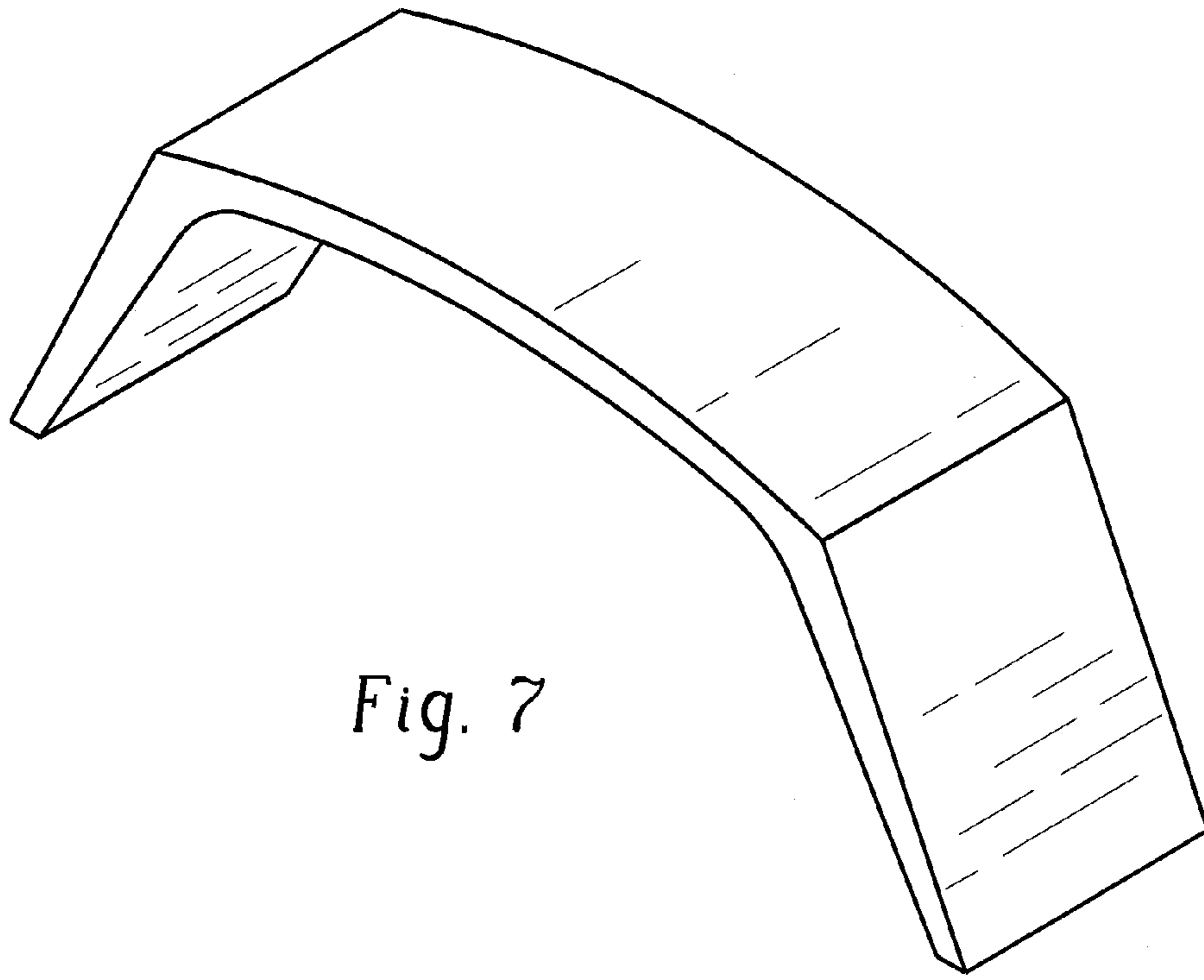


Fig. 7

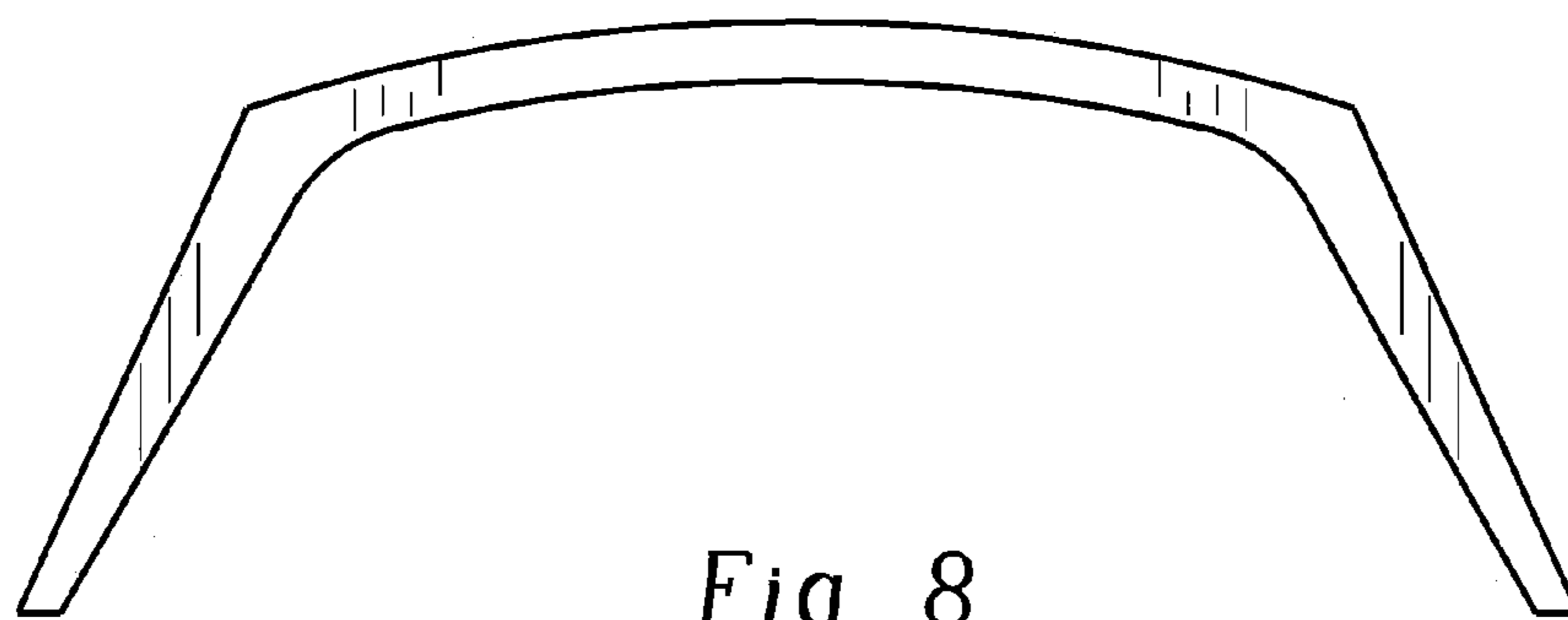


Fig. 8

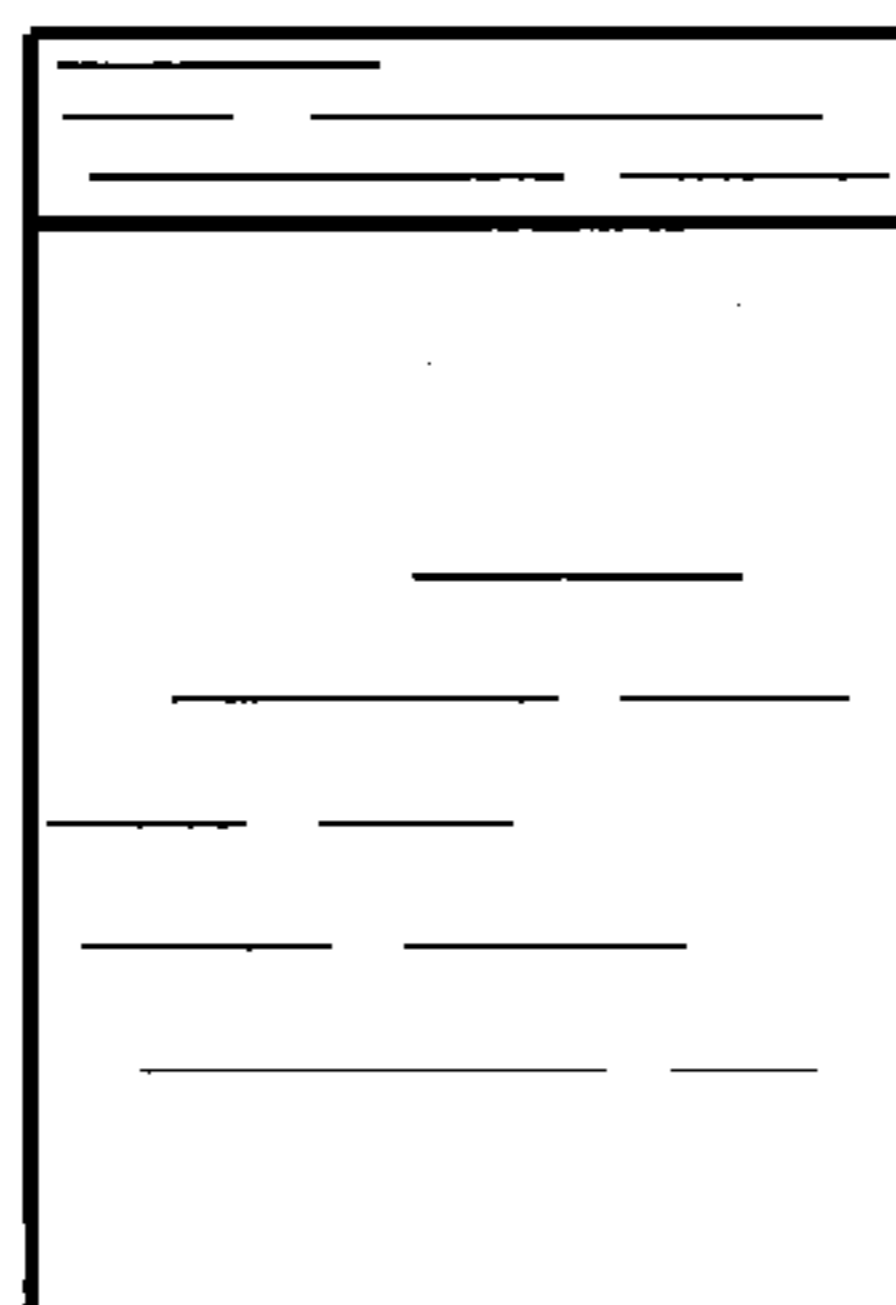


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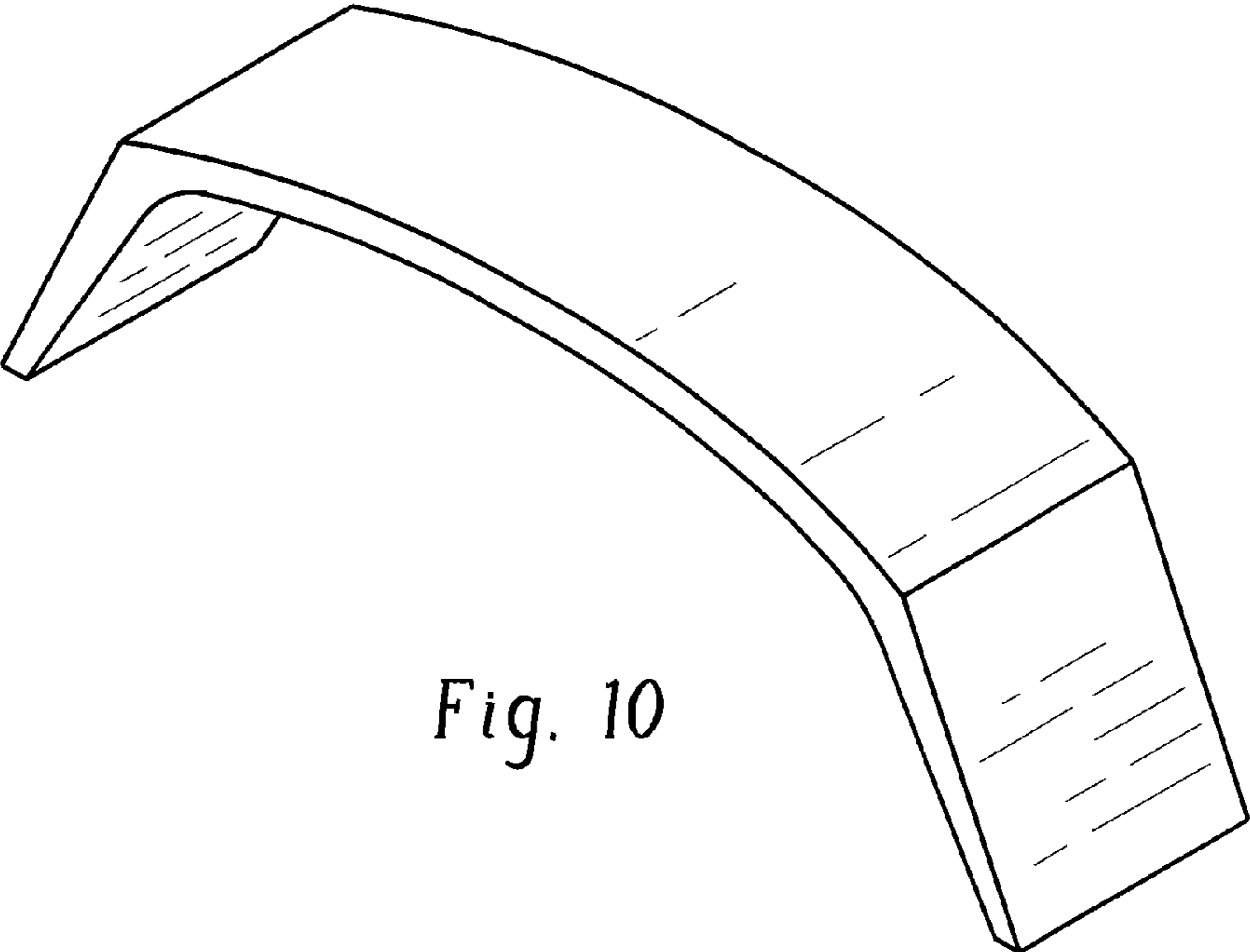


Fig. 10

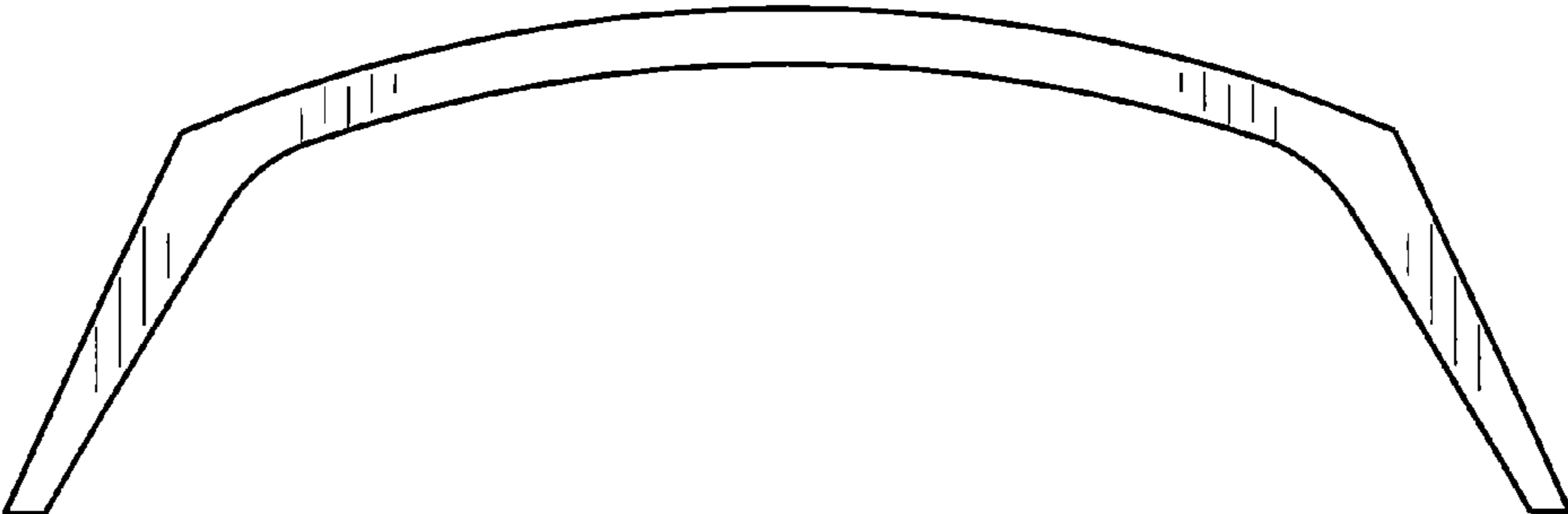


Fig. 11

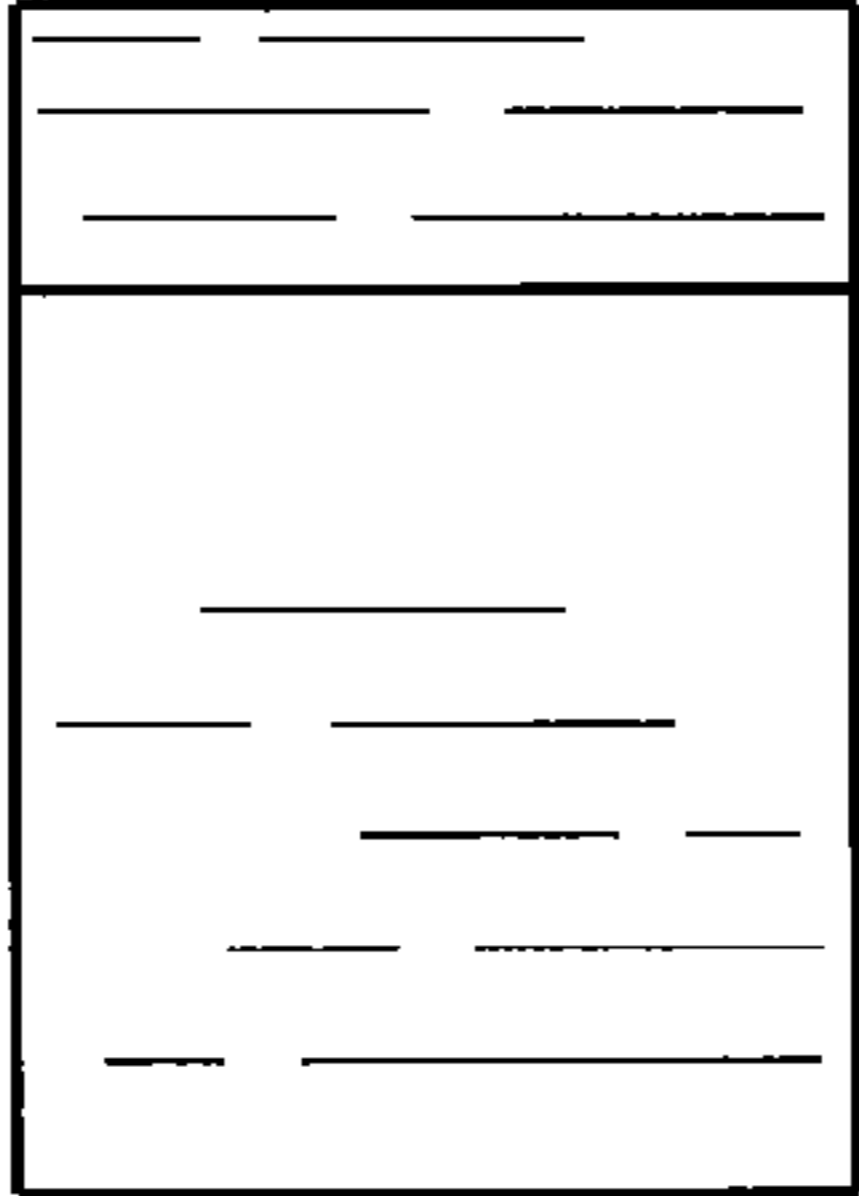


Fig. 12

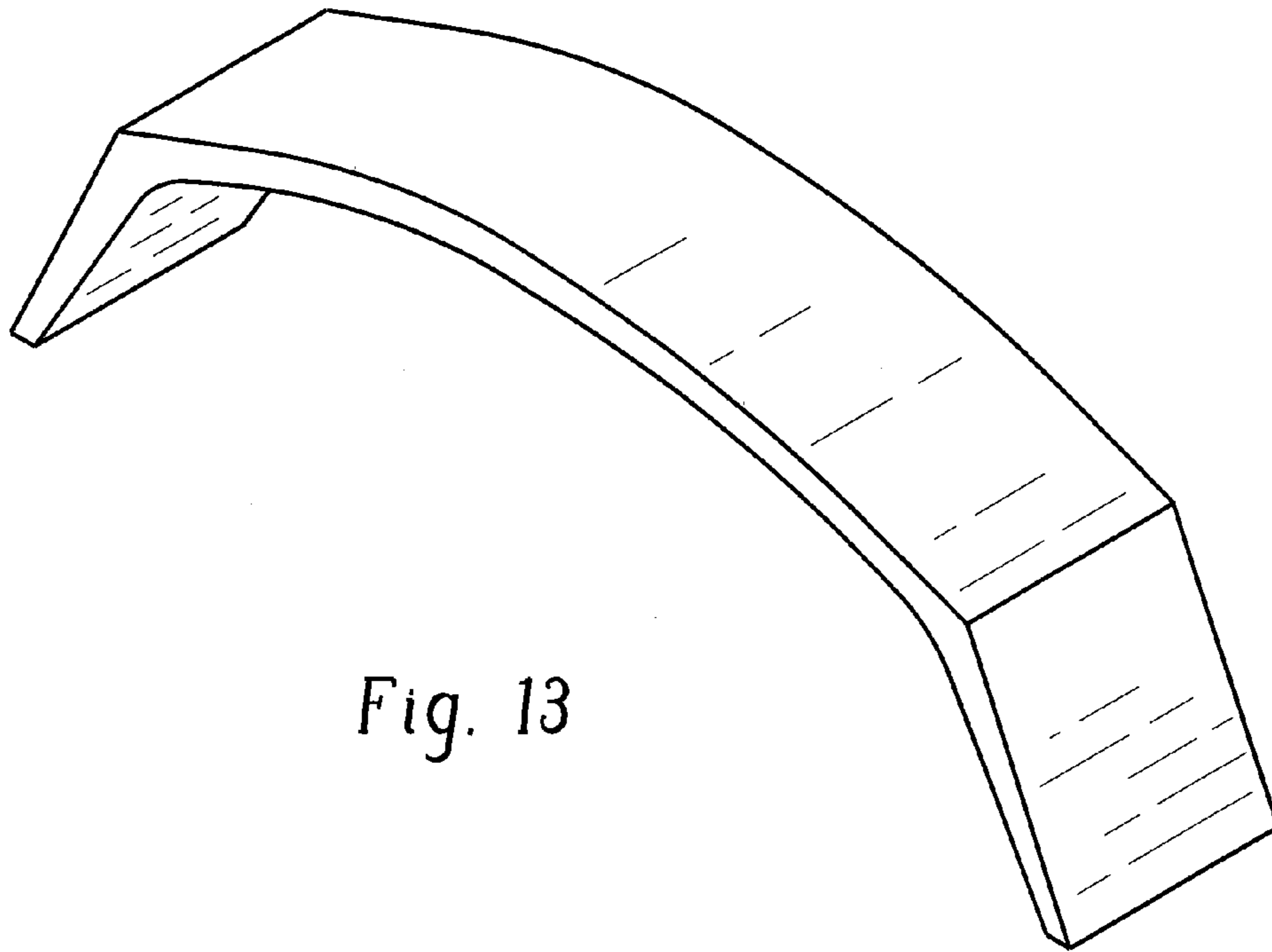


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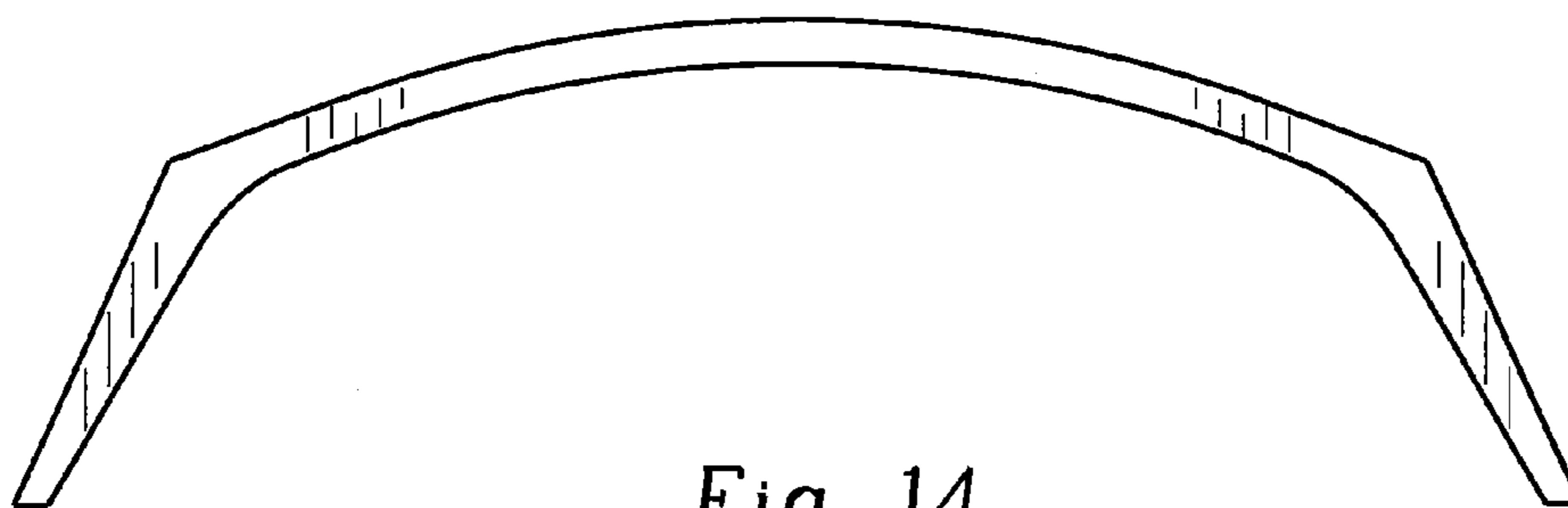


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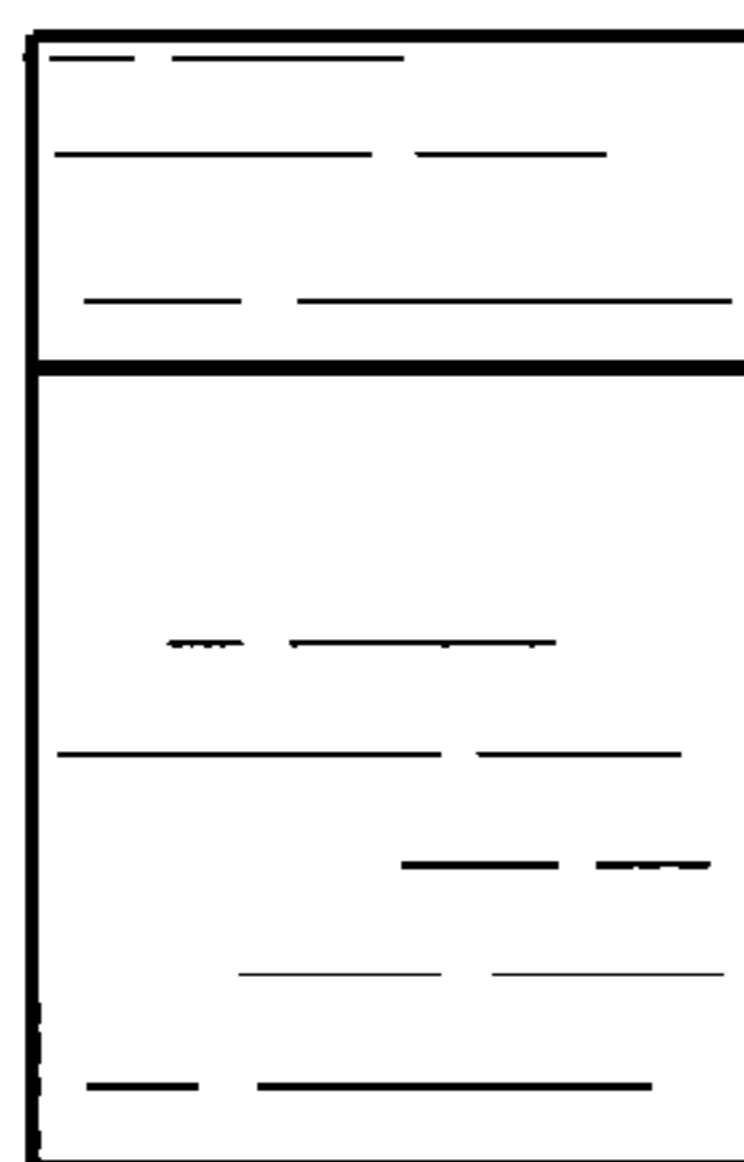


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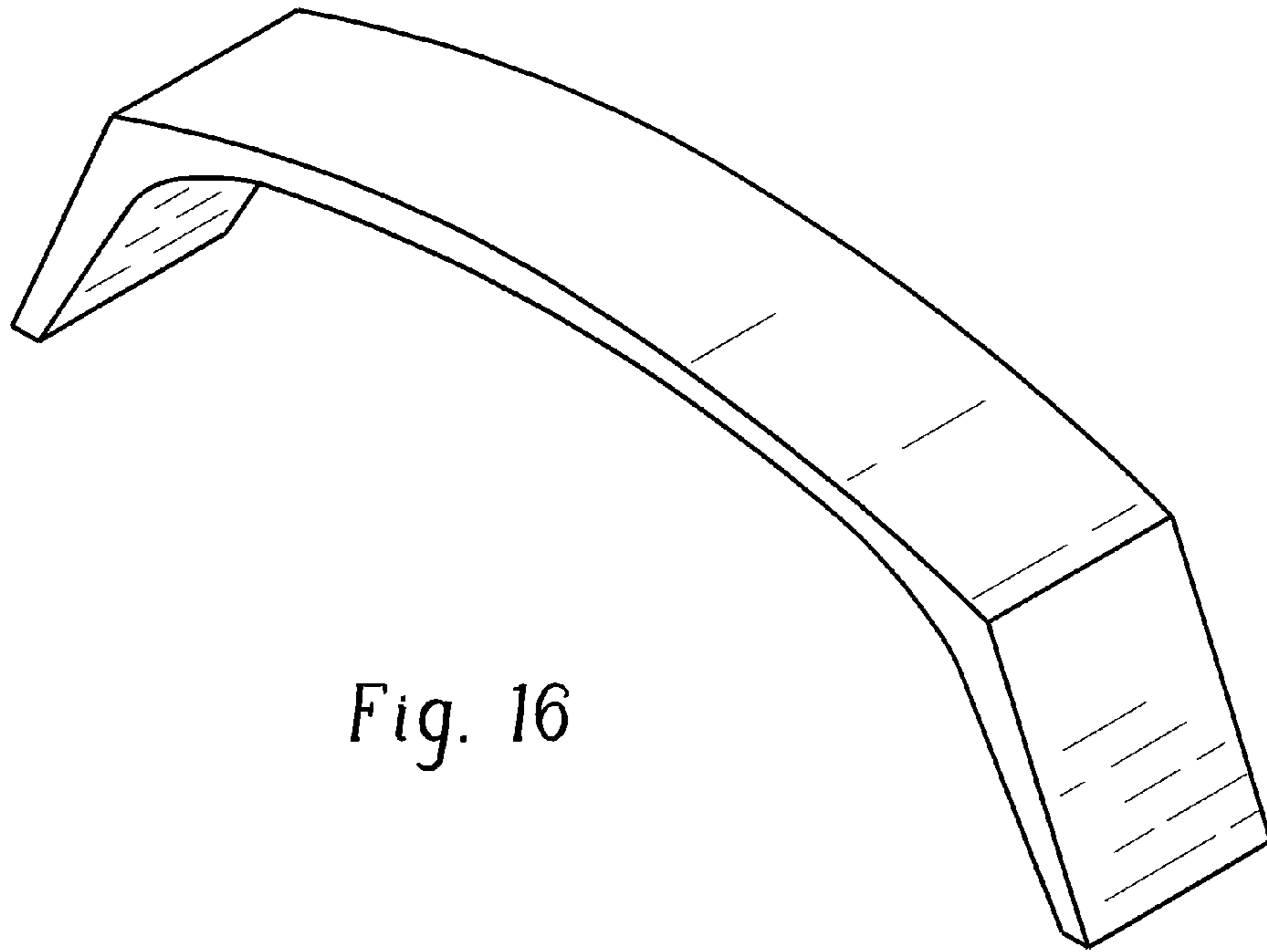


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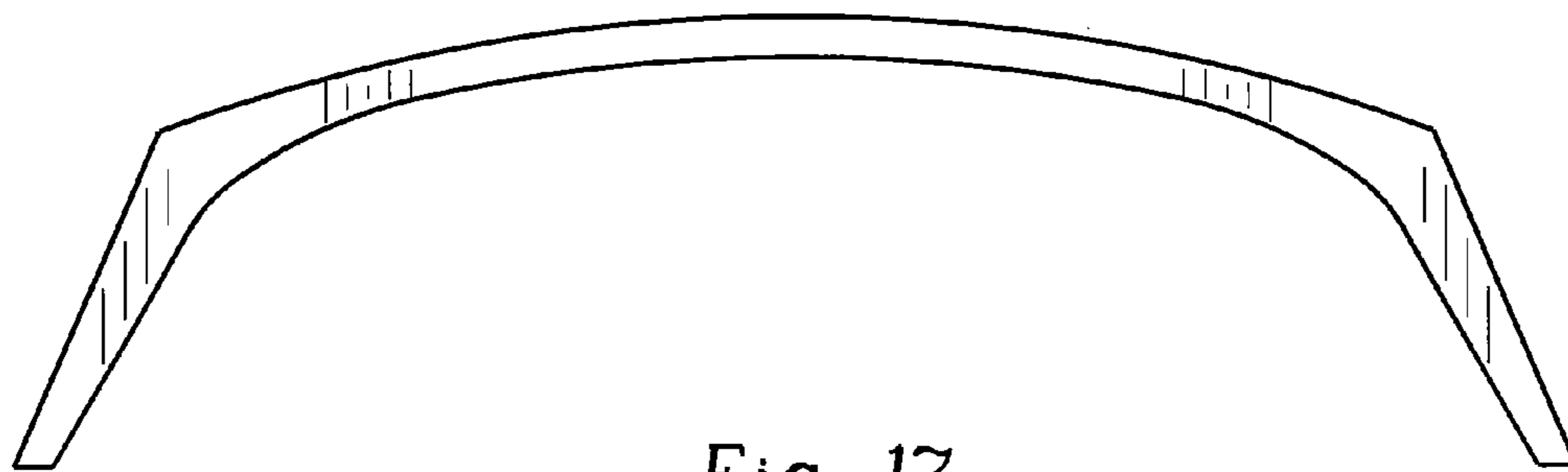


Fig. 17

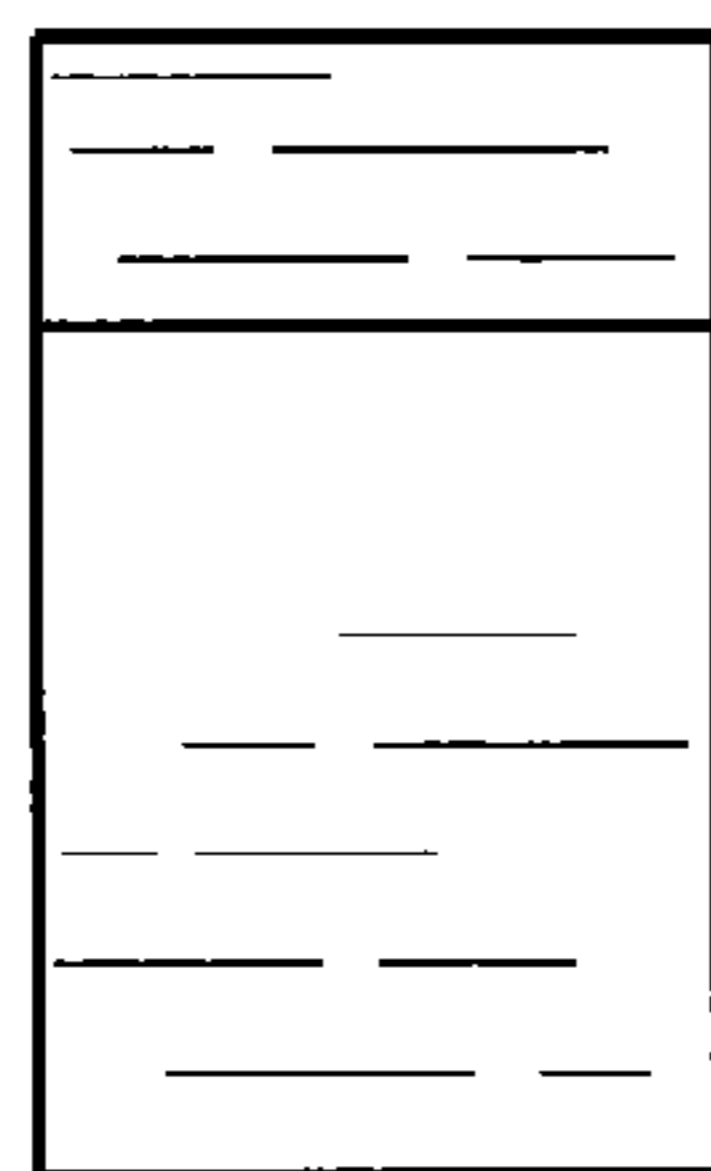


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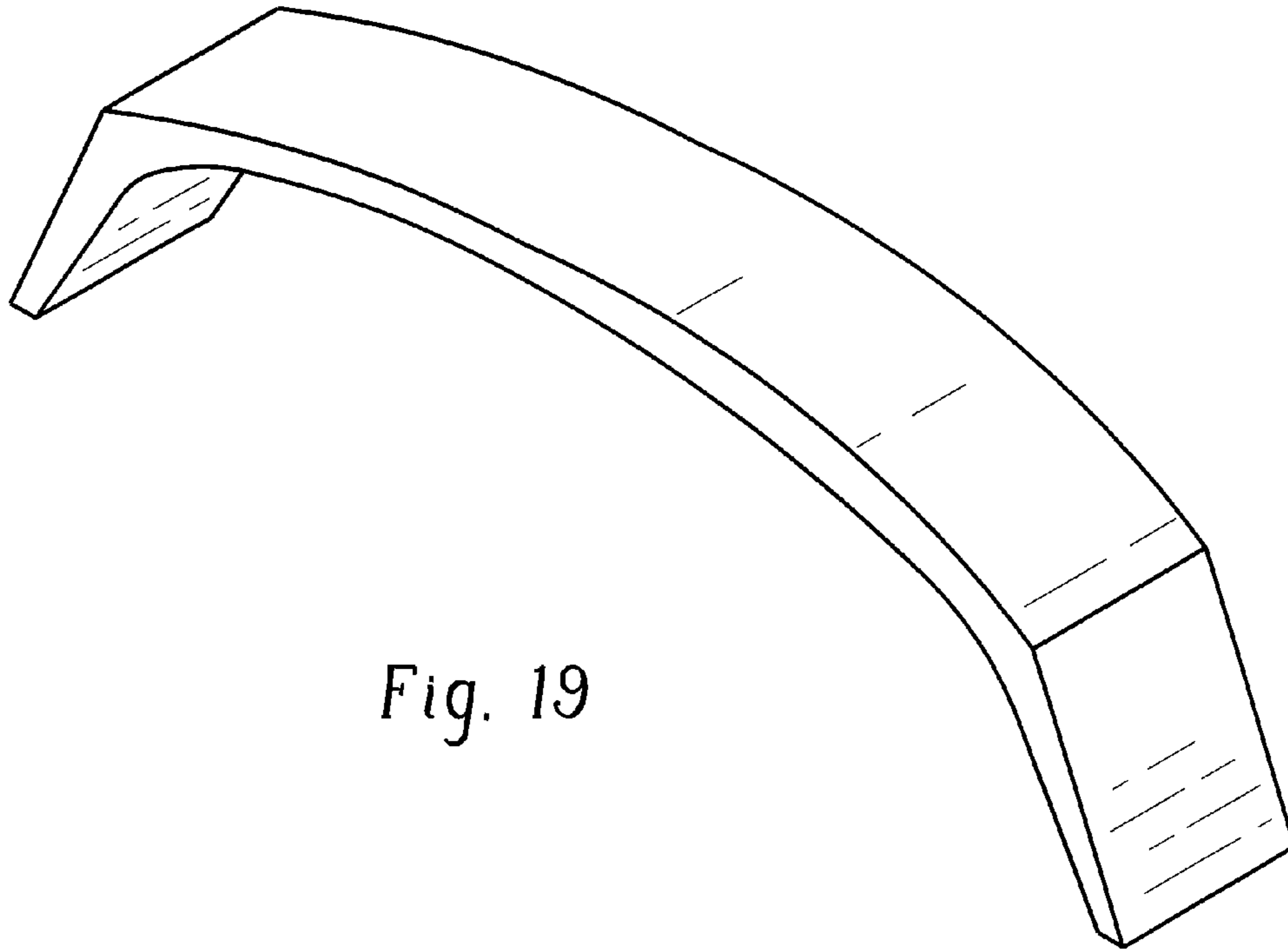


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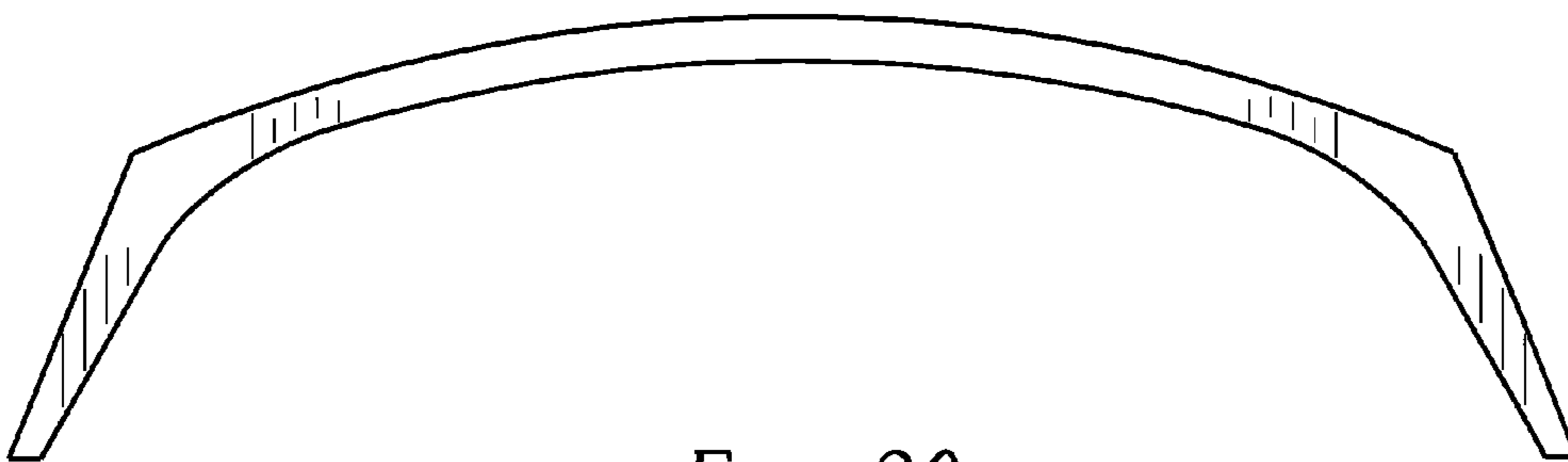


Fig. 20

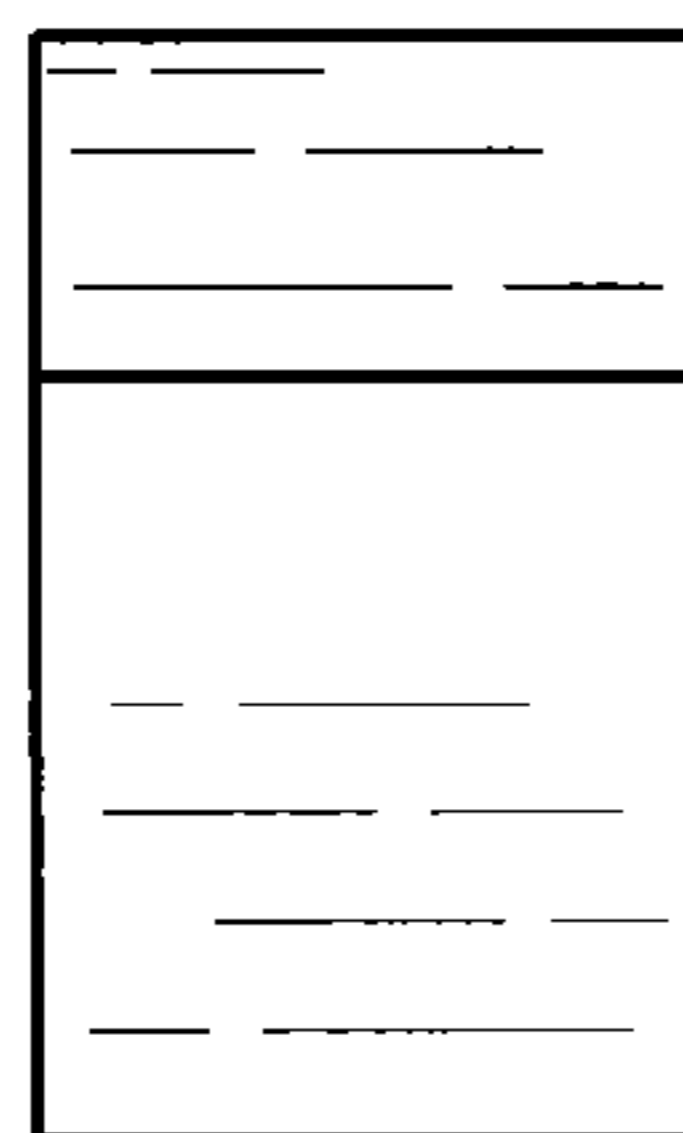


Fig. 21

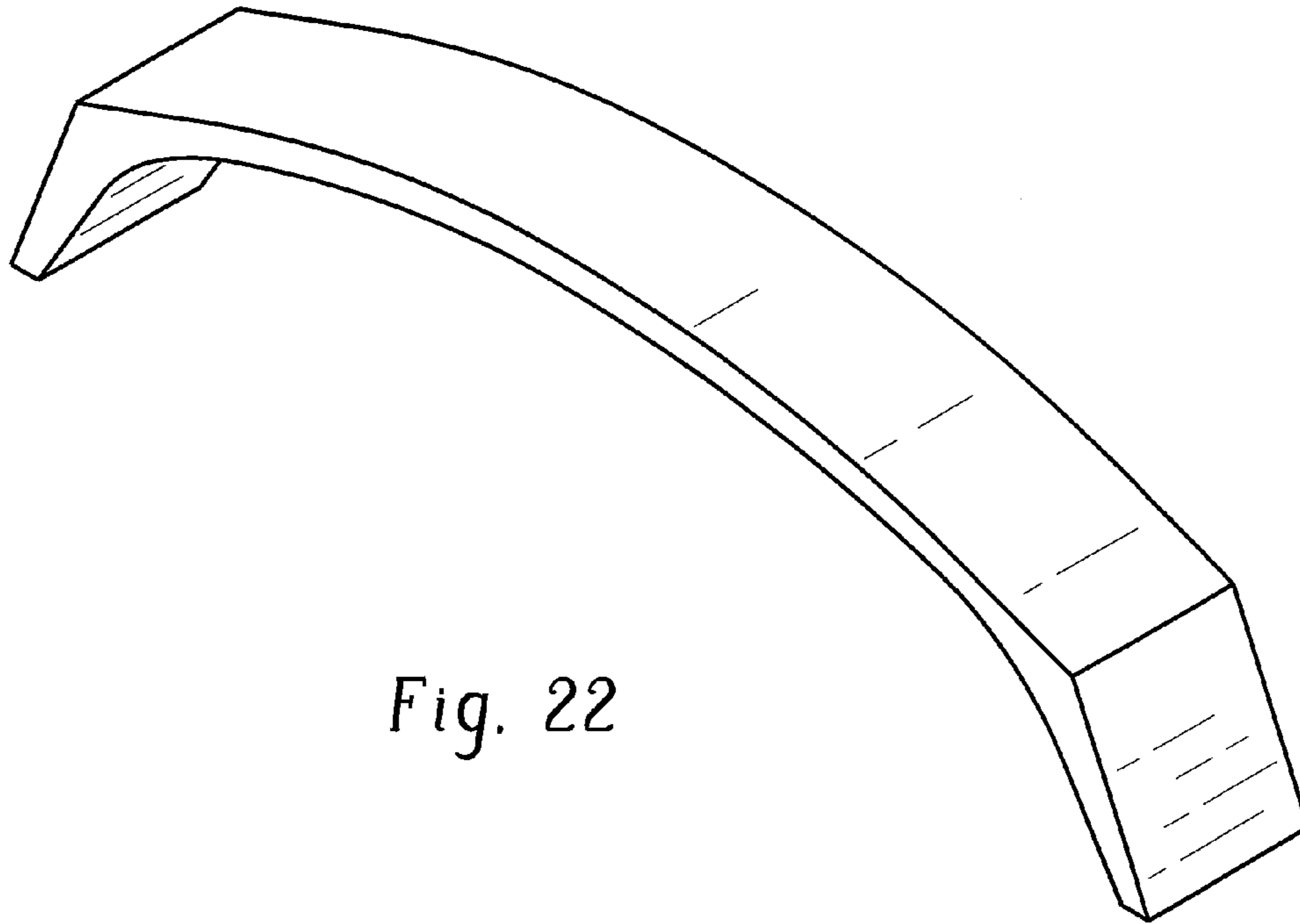


Fig. 22

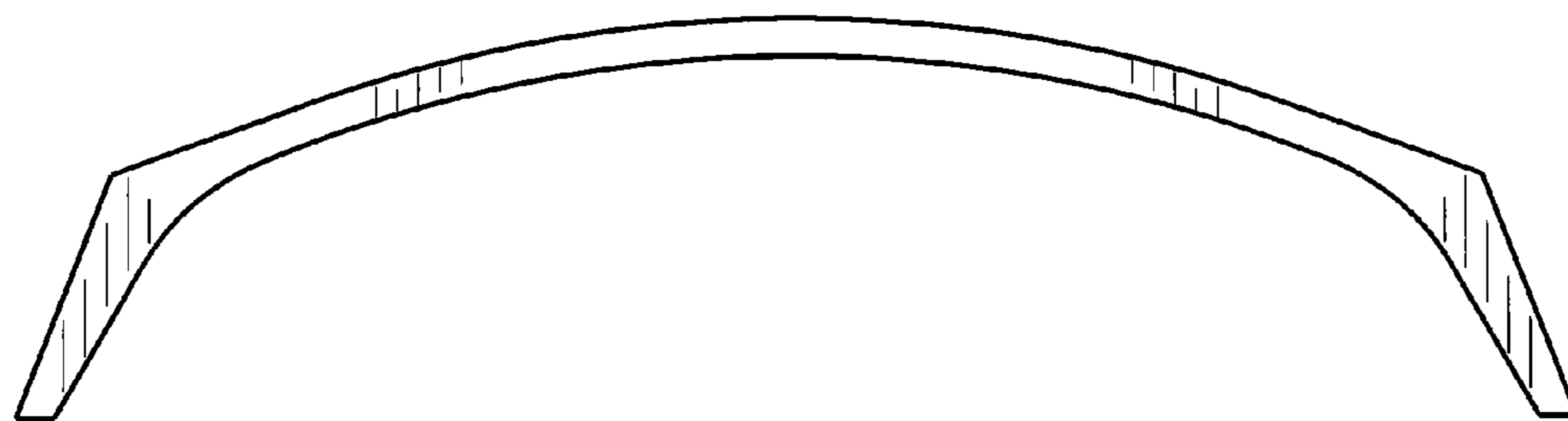


Fig. 23

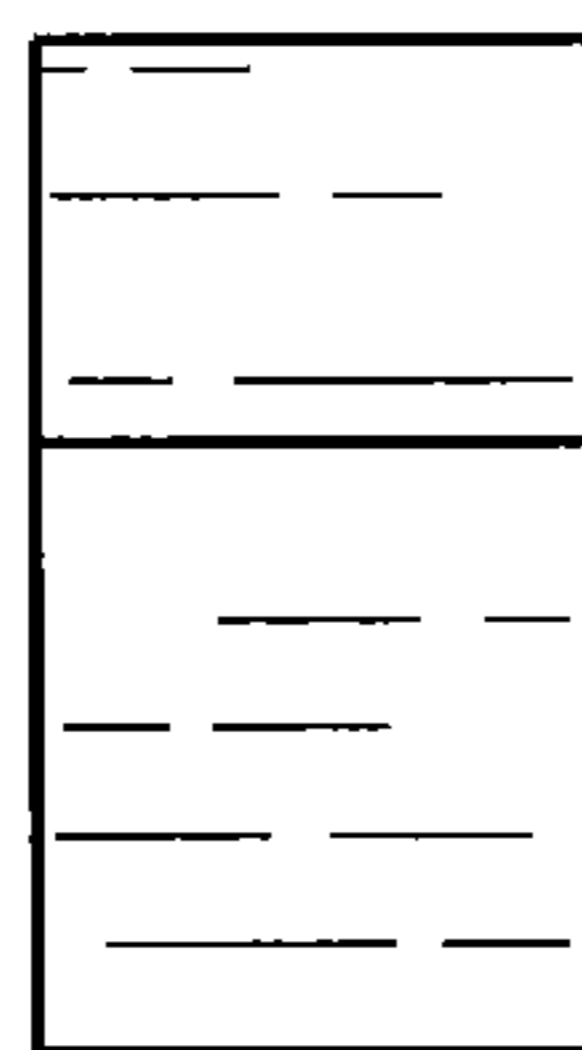


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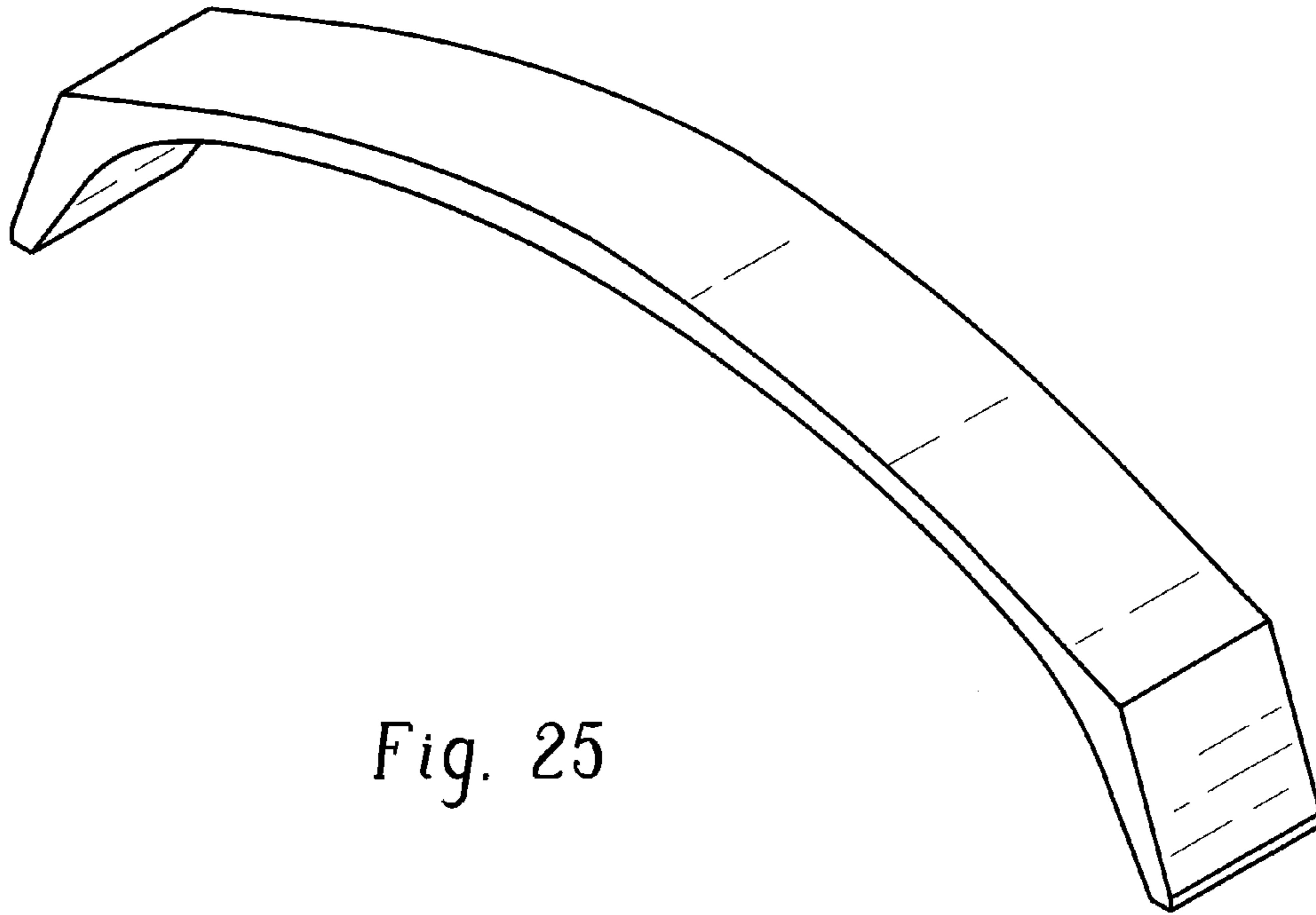


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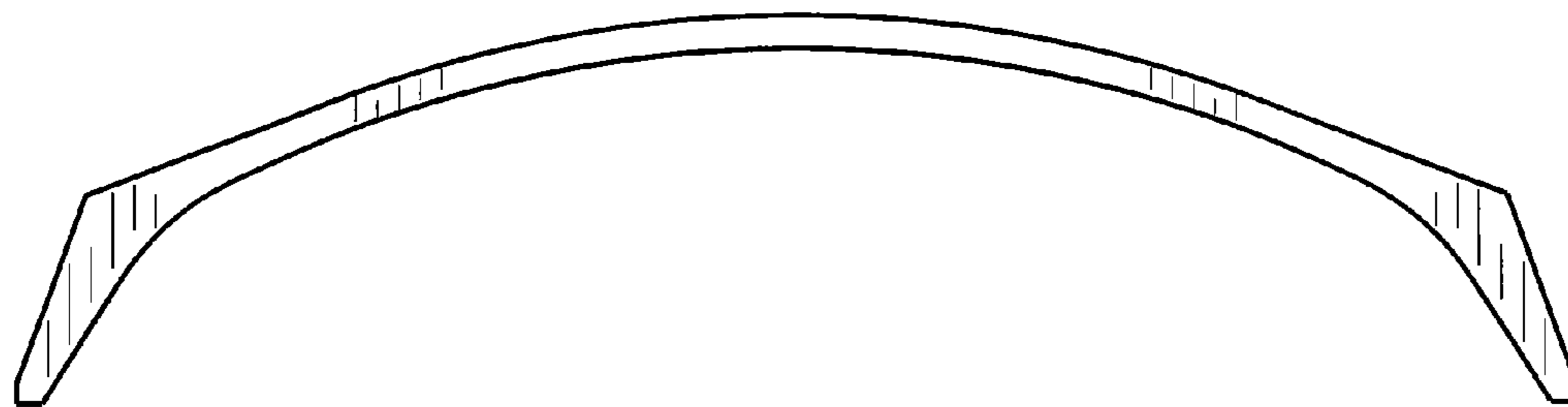


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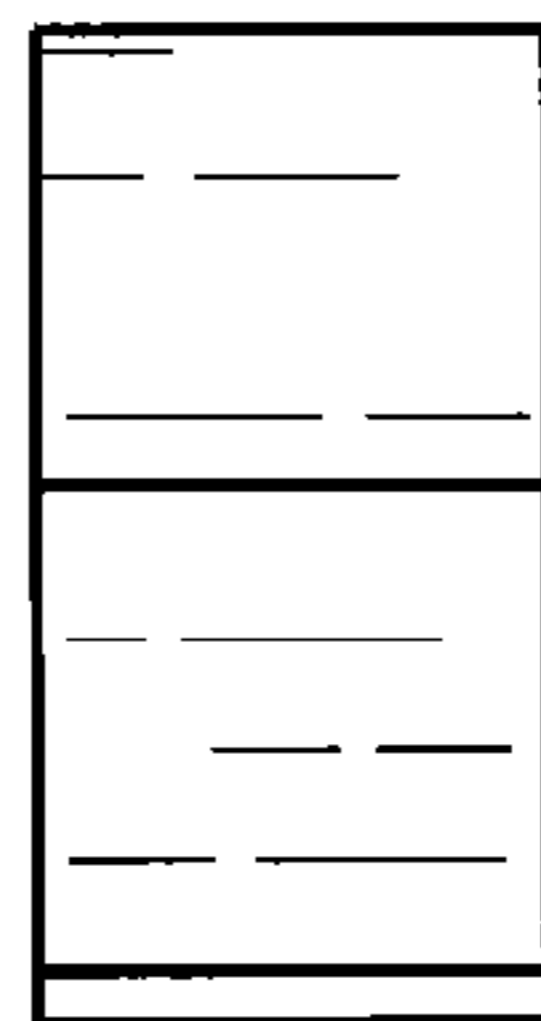


Fig. 27

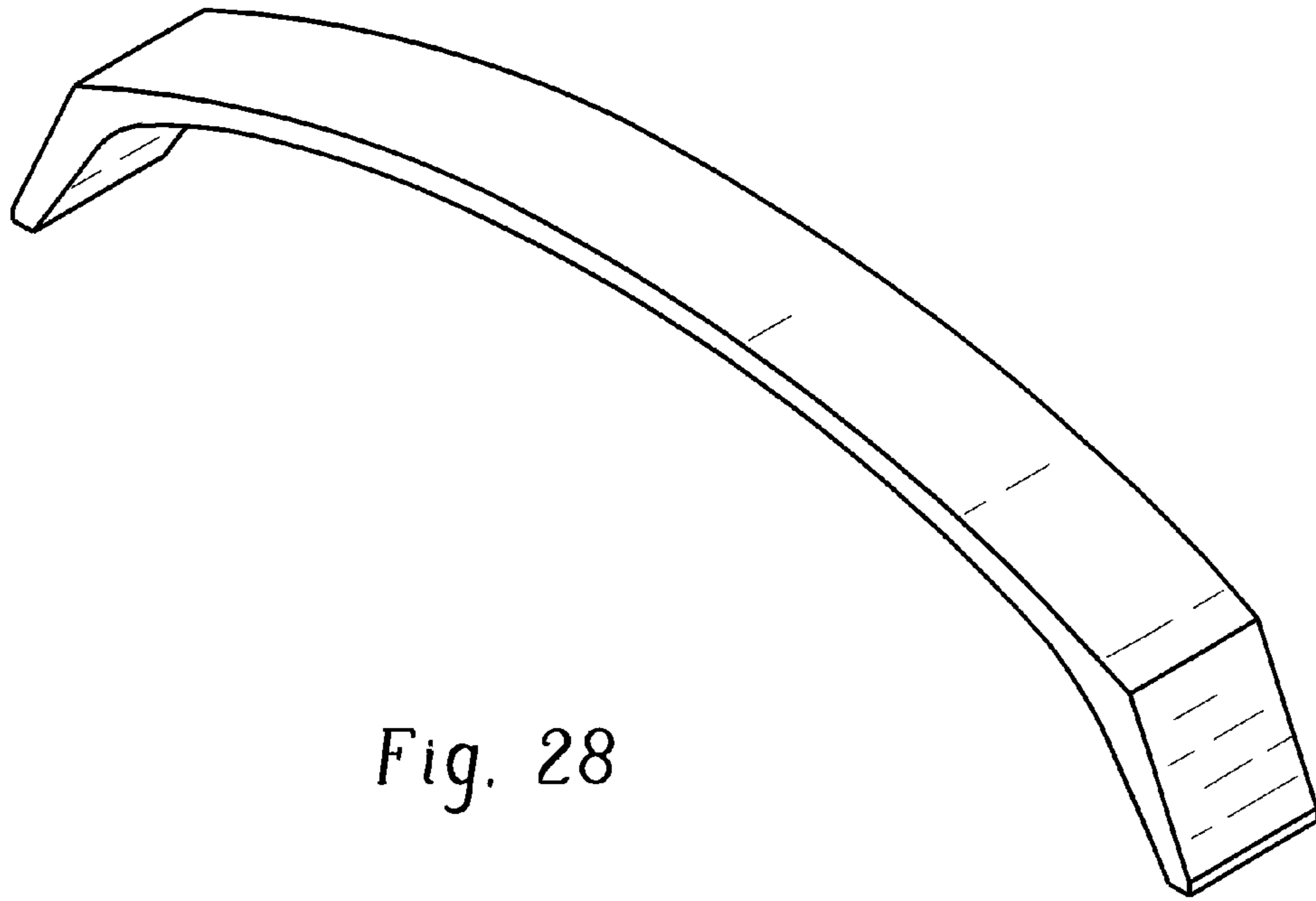


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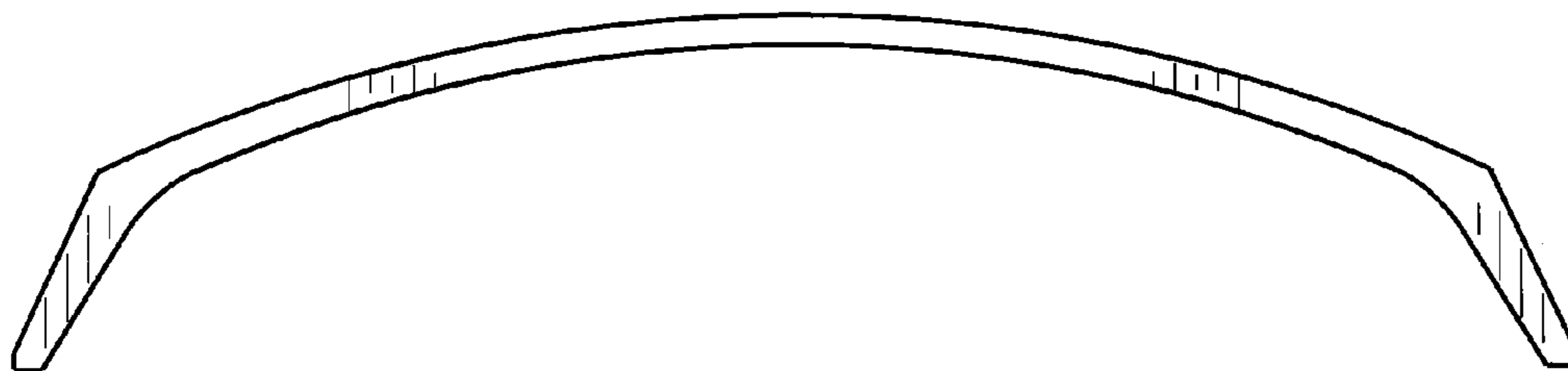


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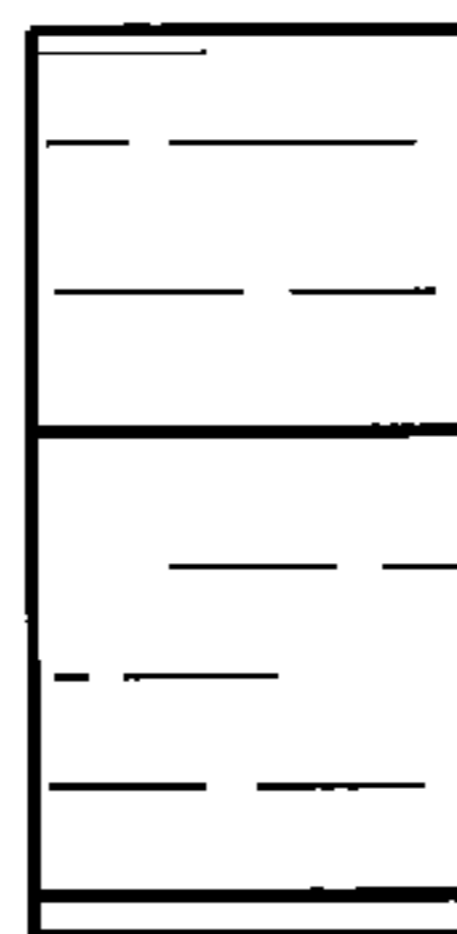


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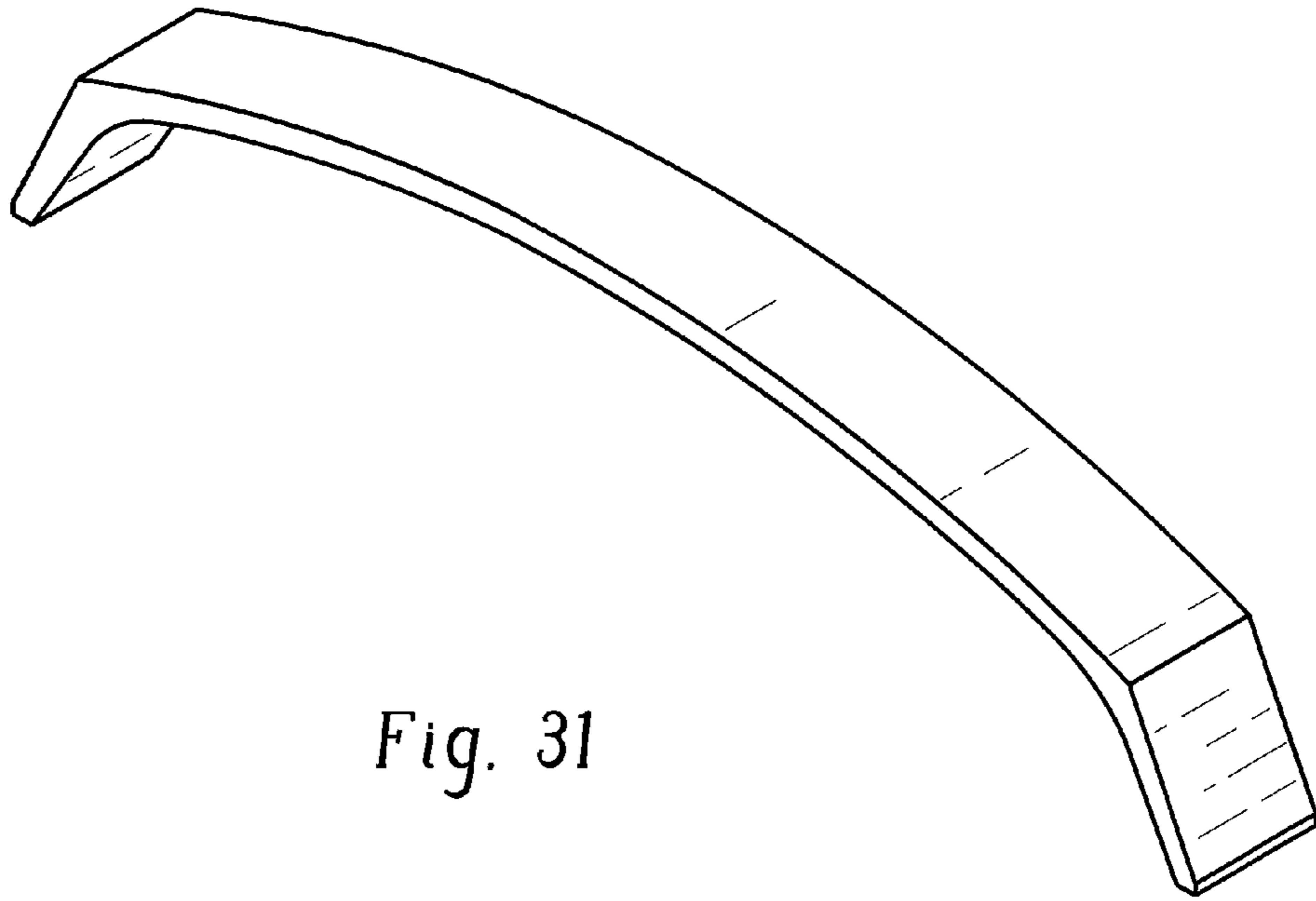


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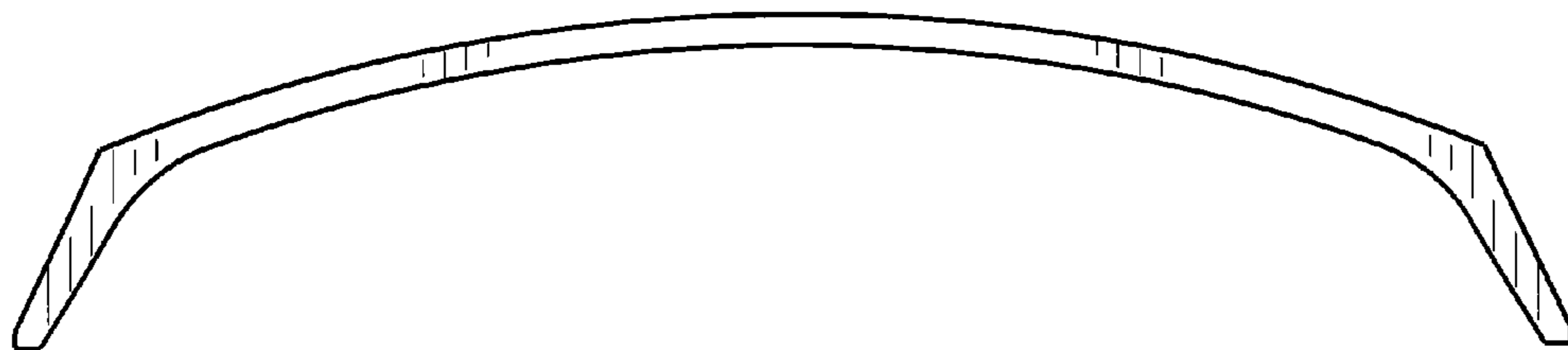


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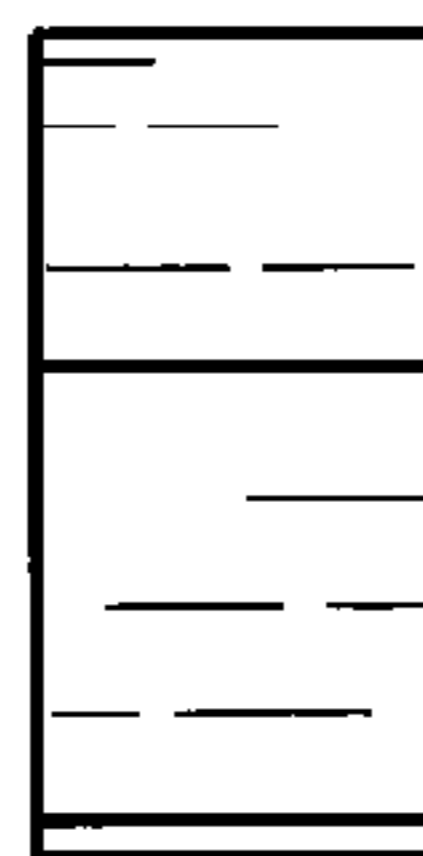


Fig. 33

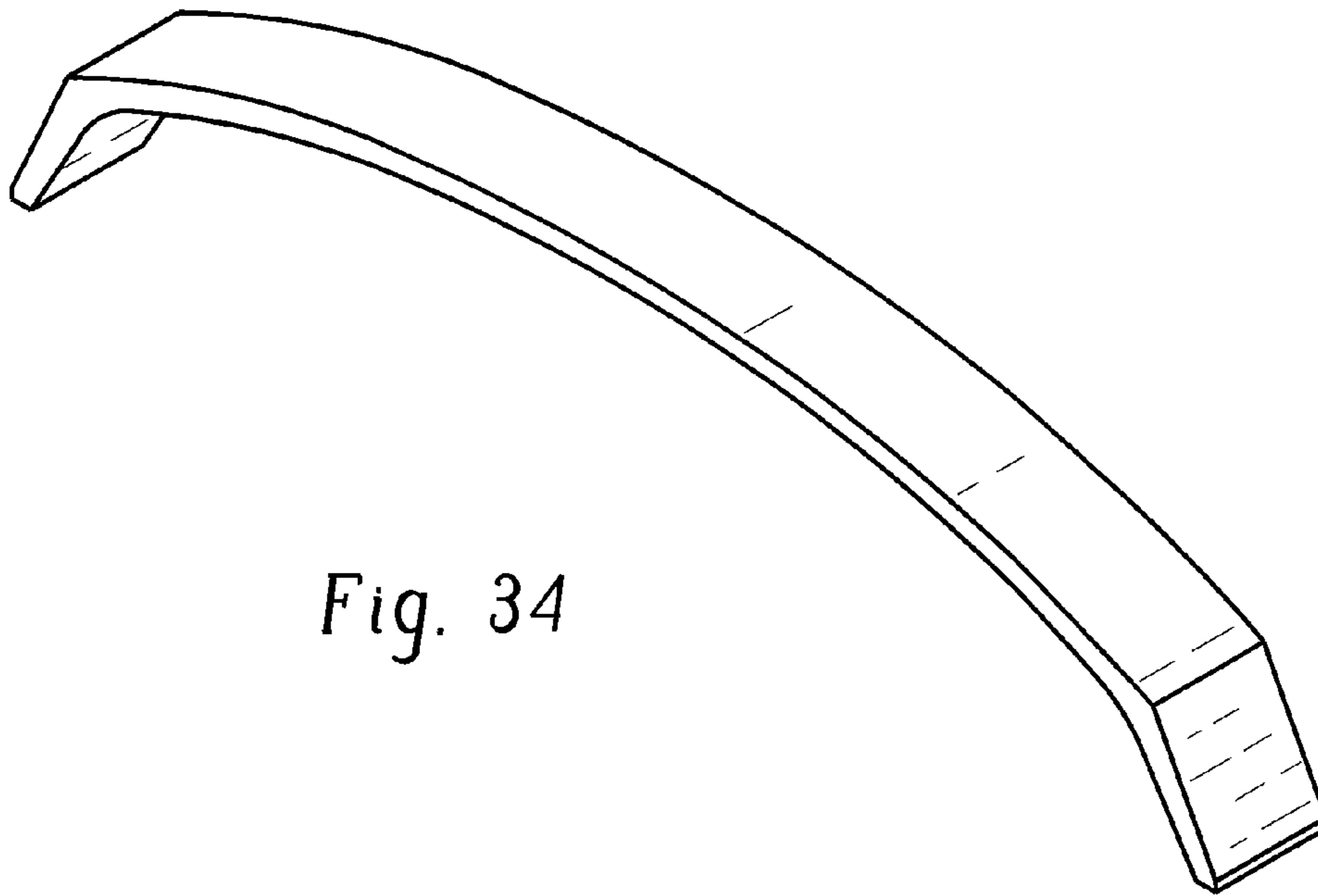


Fig. 34

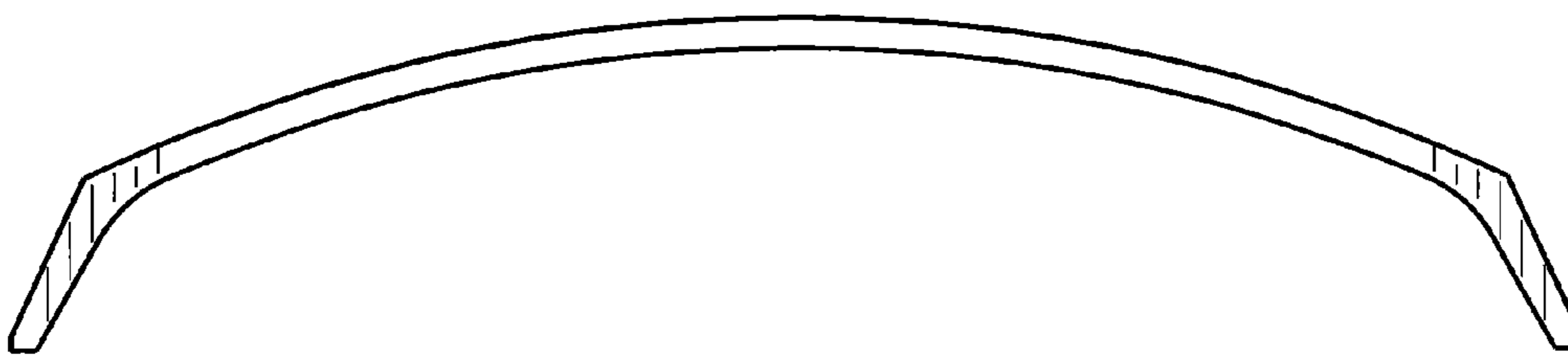


Fig. 35

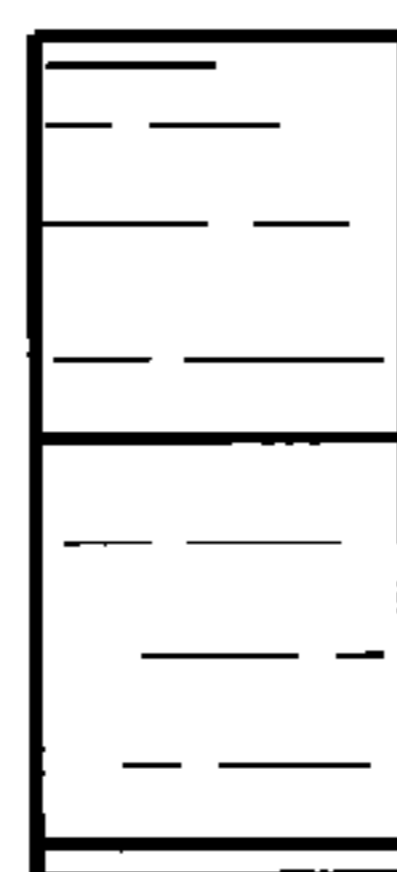


Fig. 36